

Digitized by the Internet Archive  
in 2024 with funding from  
University of Toronto

<https://archive.org/details/39040914040143>







Catalogue no. 89-553-XPB



# Labour Markets, Social Institutions, and the Future of Canada's Children

Edited by  
Miles Corak

1937 1952 1967 1982 1997 2012  
1840 1890 1940 1990 2040 2090  
1996 2000 2004 2008 2012 2016



# Data in many forms

Statistics Canada disseminates data in a variety of forms. In addition to publications, both standard and special tabulations are offered. Data are available on the Internet, compact disc, diskette, computer printouts, microfiche and microfilm, and magnetic tape. Maps and other geographic reference materials are available for some types of data. Direct online access to aggregated information is possible through CANSIM, Statistics Canada's machine-readable database and retrieval system.

## How to obtain more information

Inquiries about this publication and related statistics or services should be directed to: Analytical Studies Branch, Statistics Canada, Ottawa, Ontario, K1A 0T6 (telephone: (613) 951-9047, fax (613) 951-5403, e-mail: [coramil@statcan.ca](mailto:coramil@statcan.ca)) or to the Statistics Canada Regional Reference Centre in:

Halifax	(902) 426-5331	Regina	(306) 780-5405
Montréal	(514) 283-5725	Edmonton	(403) 495-3027
Ottawa	(613) 951-8116	Calgary	(403) 292-6717
Toronto	(416) 973-6586	Vancouver	(604) 666-3691
Winnipeg	(204) 983-4020		

You can also visit our World Wide Web site: <http://www.statcan.ca>

Toll-free access is provided **for all users who reside outside the local dialing area** of any of the Regional Reference Centres.

National enquiries line	1 800 263-1136
National telecommunications device for the hearing impaired	1 800 363-7629
Order-only line (Canada and United States)	1 800 267-6677

## Ordering/Subscription information

### All prices exclude sales tax

Catalogue no. 89-553-XPB, is published as a standard **paper product** for \$35.00 in Canada. Outside Canada the cost is US\$35.00.

Please order by mail, at Statistics Canada, Dissemination Division, Circulation Management, 120 Parkdale Avenue, Ottawa, Ontario, K1A 0T6; by phone, at **(613) 951-7277** or **1 800 770-1033**; by fax, at **(613) 951-1584** or **1 800 889-9734**; or by Internet, at [order@statcan.ca](mailto:order@statcan.ca). For changes of address, please provide both old and new addresses. Statistics Canada products may also be purchased from authorized agents, bookstores and local Statistics Canada offices.

## Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner and in the official language of their choice. To this end, the agency has developed standards of service which its employees observe in serving its clients. To obtain a copy of these service standards, please contact your nearest Statistics Canada Regional Reference Centre.





Statistics Canada

# Labour Markets, Social Institutions, and the Future of Canada's Children

Edited by  
Miles Corak

Published by authority of the Minister responsible for Statistics Canada

© Minister of Industry, 1998

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission from Licence Services, Marketing Division, Statistics Canada, Ottawa, Ontario, Canada, K1A 0T6.

November 1998

Catalogue no. 89-553-XPB

Frequency: Occasional

ISBN 0-660-59384-X

Ottawa



---

## Note of appreciation

*Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.*

## Canadian Cataloguing in Publication Data

Main entry under title:

Labour Markets, Social Institutions, and the Future of Canada's Children

Text in English and French with French text on inverted pages.

ISBN 0-660-59384-X

CS89-553-XPB

1. Youth – Canada – Social conditions.

2. Youth — Canada — Economic conditions.

3. Youth — Employment — Canada.

4. Labour market – Canada.

5. Income distribution – Canada.

6. Canada — Social conditions — 1991-.

I. Corak, Miles R. (Miles Raymond), 1958-.

II. Statistics Canada.

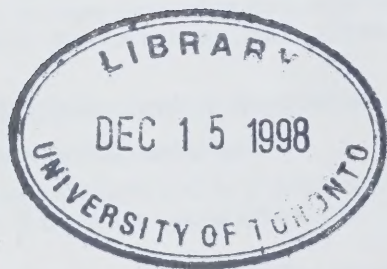
III. Title.

IV. Title: Les marchés du travail, les institutions sociales et l'avenir des enfants au Canada.

HQ799.C3 L32 1998

305.23'0971

C98-988017-6E



The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences – Permanence of Paper for Printed Library Materials, ANSI Z39.48 – 1984.





# Table of Contents

---

Preface and Acknowledgements .....	v
Foreward .....	vii
ARTHUR KROEGER	
Contributors .....	xi
Chapter 1	
Introduction .....	1
MILES CORAK	
Chapter 2	
Markets, Families and Social Transfers: Trends in Low-Income Among the Young and Old, 1973-95 .....	11
GARNETT PICOT, JOHN MYLES AND WENDY PYPER	
Chapter 3	
The Declining Labour Market Status of Young Men .....	31
RENÉ MORISSETTE	
Chapter 4	
Intergenerational Income Mobility in Canada .....	51
NICOLE M. FORTIN AND SOPHIE LEFEBVRE	
Chapter 5	
How to Get Ahead in Life: Some Correlates of Intergenerational Income Mobility in Canada .....	65
MILES CORAK AND ANDREW HEISZ	
Chapter 6	
The Impact of Family Disruption in Childhood on Demographic Outcomes in Young Adulthood .....	91
CÉLINE LE BOURDAIS AND NICOLE MARCIL-GRATTON	
Chapter 7	
Child Psychiatric Disorders, Poor School Performance and Social Problems: The Roles of Family Structure and Low-Income .....	107
MARTIN D. DOOLEY, LORI CURTIS, ELLEN L. LIPMAN AND DAVID H. FEENY	
Chapter 8	
Intergenerational Aspects of Education and Literacy Skills Acquisition .....	129
PATRICE DE BROUCKER AND LAVAL LAVALLÉE	

Chapter 9	
Health Care Utilization During the First Year of Life: The Impact of Social and Economic Background .....	145
TAMARA KNIGHTON, CHRISTIAN HOULE, JEAN-MARIE BERTHELOT AND CAM MUSTARD	
Chapter 10	
Eternal Youth? Changes in the Living Arrangements of Young People .....	157
DOMINIQUE MEUNIER, PAUL BERNARD AND JOHANNE BOISJOLY	
Chapter 11	
Perspectives on Policy .....	171
SUSAN A. McDANIEL, "Intergenerational Equity: Policy and Data Implications"	
BOB BALDWIN, "Intergenerational Equity: The Objectives of Policy"	



# Preface and Acknowledgements

---

The contributors to this book examine two broad themes related to the well-being of Canadian youth. First, they document the nature of the labour market facing young adults and how it has changed since the early 1970s. Second, the authors examine how families, communities, and the public sector influence some of the ways in which children become successful and self-reliant adults. The motivation for bringing these essays together has to do with the increasing importance of child well-being in public discourse and the development of public policy.

It is a truism to say that good analysis requires good data, and certainly Statistics Canada's role is to offer high-quality data in support of analysis and decision making. But the opposite is equally true, if not as obvious: good data requires good analysis. That is to say, new analytical developments often highlight the need to organize existing data in different ways, as well as the need for the development of new data. This is certainly one of several reasons that Statistics Canada has sought to develop a strong analytical capacity, and to maintain strong ties with the research community.

This book contributes to this process in a number of ways. The approaches to analysis vary tremendously: some chapters are purely descriptive pieces, others adopt a variety of methods and analytical perspectives including economics, demography, sociology, and behavioural psychology. In all cases the authors push the available data to their limits, organize existing data in innovative ways, and even create and use entirely new data sources. But the book is also meant to contribute to the public policy process in what is an area of increasing importance. The intention is to offer policy makers, and Canadians at large, access to some of the most recent findings on the long term determinants of child well-being, highlighting the role of the family, community, and the state.

A companion volume also published in 1998 by Statistics Canada called *Government Finances and Generational Equity* examines the operation of government taxes and transfers from a generational perspective, focusing on the conduct of fiscal policy and the relative status of individuals in successive generations. Both books are based upon papers presented at a conference held at Statistics Canada in February 1997. Funding for the conference was obtained from the Analytical Studies Branch of Statistics Canada, and the Applied Research Branch of Human Resources Canada. I would like to thank Stewart Wells of Statistics Canada and Allen Zeesman of Human Resources Development Canada for acting as co-sponsors. The conference represented an important first step in the process of reviewing and revising the papers for publication, and I would also like to thank the group of people who acted either as chairpersons, commentators, or referees: Bob Baldwin, Roderic Beaujot, Geoff Dougherty, Chris Ferrall, Jane Gentleman, David Gray, Ronald Hirshhorn, Guy Lacroix, Jim Lahey, Paul Lanoie, Dean Lillard, Huw Lloyd-Ellis, Mike McCracken, Susan McDaniel, Alice Nakamura, Lars Osberg, James Pesando, Suzanne Peters, Robin Rowley, William Scarth, Andrew Sharpe, Jean-Pierre Voyer, Ted Wannell, Brian Ward, Ging Wong, Allen Zeesman, and David Zimmerman. In addition, I would also like to thank Charles Beach, John Helliwell, and Shelley Phipps for participating in a session at the 1998 meetings of the Canadian Economics Association at which some of the chapters were presented and discussed, and to acknowledge comments and suggestions made by Philip Cross, Susan McDaniel, and John Myles on a first draft of Chapter 1. At the same time it should be noted that the views expressed in this publication are those of the authors, and should not be interpreted as representing the official positions of either Statistics Canada or Human Resources Development Canada.

The organization of the conference and the publication of this book owes much to Valerie Thibault. I would like to thank her and Francine Simoneau, who were together responsible for the layout and design of the publication. Thanks also goes to Suzanne David, who did the French editing with great efficiency. Other members of the team contributing to this publication include

staff from the Dissemination Division, and Agnes Thompson of Communications Division who helped organize the conference.

Miles Corak  
Statistics Canada



# Foreward

ARTHUR KROEGER

---

What particularly stands out upon reading the chapters of this book and its companion volume is the extent of the changes that have taken place in Canada in recent decades, and that are still in train. Some of these changes are good news, but many are not. What is particularly sobering is the evidence that, some thirty years after Mr. Pearson's government finished putting in place the main elements of our social programs, many social problems persist. Very large expenditures by governments have had mixed results, and in some areas we are losing rather than gaining ground.

It is clear that in the past decade or so the pre-retirement cohort have sustained a number of reductions in the transfers that benefit them such as unemployment insurance, in addition to which governments have imposed a series of increases in taxation. The post-retirement cohort, on the other hand, have so far been left largely unscathed, and some of their benefits have increased as a result of indexation. However, the primary cause of the shift in the balance between the two groups is not excessively generous treatment of the elderly or any other action on the part of governments. Rather, it is the result of a number of trends in labour markets and the global economy which have worked to the detriment of the pre-retirement cohort.

This is not to say that actions, and in some cases inaction, by governments have been unimportant. We are all aware of the enormous public debts that have been built up through some two decades of deficit financing. Also well known are various major unfunded liabilities in programs such as Ontario Workers' Compensation, and the looming problems of financing the Canada/Quebec Pension Plan in the next century. All of these represent significant burdens that will have to be borne in one degree or another by future generations.

There are, however, several reassuring features about our current intergenerational problems. First, they are not in themselves particularly complex. Given sufficient political will, the solutions to them are relatively easy to discern. The same is not true of some other contemporary problems such as unemployment.

Secondly, it has been demonstrated in the recent past that intergenerational problems are not so politically potent that no one dares deal with them. Witness, for example, the fact that seven provinces have balanced their budgets in recent years and some have now begun paying down their accumulated debt. They have also been joined by the federal government. In addition, the 1996 federal budget unveiled a set of measures to re-shape the Old Age Security program and to target resources on the elderly who are most in need. Most recently, we have seen the agreement by Ottawa and eight of the provinces to accelerate the schedule of Canada Pension Plan premium increases, so that those who are now in their forties and fifties will be required to make a greater contribution to the costs of the pensions they will draw in their seventies. Each of these measures has generated a certain amount of controversy, but what we have seen to date is far short of being a political firestorm.

In assessing intergenerational equity, it is important to take account of private as well as governmental transfers. It is basic to most societies that parents support their children, and many in Canada continue to do so until quite late in life. Raising a family is not commonly thought of as a zero sum game, in which children upon reaching maturity spend amounts on their parents equal to what had been spent on them. In most cases, the private transfers that parents make to their children over a lifetime exceed what they receive in return. Moreover, these transfers are

in many cases not offset by the sum of the transfers the elderly receive from governments over a lifetime.

The virtual abolition of extreme poverty among elderly through government transfers should be regarded as a major success of Canadian social policy, and not as a contemporary problem. This is not to say that some adjustments to current programs such as those referred to above were not called for. However, the difficulties currently being experienced by the pre-retirement cohort are not primarily due to the benefits extended to the elderly, and would be only marginally alleviated even if these benefits were taken back to, say, 1950s levels. Today's adverse social trends need to be addressed in their own right, to the extent that governments can find effective means of dealing with them.

The principal constraints on most governments today are fiscal, and they are particularly acute because of efforts across the country to bring expenditures into line with revenues. In most jurisdictions, a successful end to this painful process is now in sight, but in the near term governments are going to have only limited resources at their disposal. Views are divided on the subject of deficit reduction programs, and will no doubt continue to be so. However, one of the more compelling reasons for reducing government borrowing is to arrest the growth of debt charges in relation to government revenues, and thereby leave more resources to meet program needs in the medium term.

When I was a Treasury Board official in the mid-1970s, debt service payments claimed approximately 12% of revenues. If federal governments had kept this ratio constant, that is if they had not allowed their borrowing to grow faster than their revenues over the ensuing decades, public debt charges would be some \$30 billion lower than they are today. There is much room for speculation on what a government could do with an extra \$30 billion per year, whether to reduce taxes, to meet program needs, or to effect some combination of the two. However, one can at least take comfort from the prospect that this figure is now unlikely to grow to \$40, \$50 or \$60 billion in future years.

A number of important trends are documented in the chapters of this book. Incomes are becoming more polarized, there is a pervasive sense of insecurity in the labour force, social mobility is still well short of what would be

desirable, and a growing underclass is increasingly dependent on government programs. Substantial questions are now before us about the future prospects of the millions in our population who are ill educated and lacking in skills. This group has been particularly hard hit by forces such as rapid technological change and extensive re-structuring of industry. In addition, there is growing public concern about growing inequality, as the incomes of a small group at the top of the scale increase rapidly while those of the bulk of the population continue to stagnate.

There is also some good news to be found in the following chapters. Literacy has increased sharply, and a far higher proportion of young people are now studying full time than was the case 15 or 20 years ago. Some 61% of young people are achieving levels of education higher than their fathers, and in the case of young women, the figure is 65%. The latter is especially good news. The fact that women are now a substantial majority in the post-secondary education system foreshadows an end to one of the longest standing inequities, which is the status that women have historically held in society.

Overall, however, the picture of contemporary trends is far from reassuring. Some of the social issues documented in these chapters lend themselves to financial remedies. Examples include transfer programs to benefit low-income families, and support to the educational system on a scale sufficient to ensure that it will be accessible to students of limited means. As governments progressively bring their fiscal systems into balance, fields such as these will be important claimants on the additional resources that will become available through economic growth in future years. There are, however, some very important issues that cannot be dealt with simply by the application of money. Examples include inadequate use of preventive measures in the health field by low-income groups, the impact on children of family break-ups, and the growth of single parent families.

Of all the issues currently facing policy makers none has more stubbornly resisted resolution than unemployment and the polarization of incomes in the labour force. The traditional approach of governments to employment has been to treat it as a by-product of sound economic management, and then to apply supplementary measures of one kind and another to directly encourage job creation. Today,



there is pervasive evidence that these measures are not producing the results hoped for.

Among the most widely remarked phenomena are persistent high unemployment, a stagnation in real incomes since the 1970s, a sharp decline in the incomes of young people, and growing dependence on transfer programs by those in lower paid, unskilled jobs. The growth in two-income earner families, and a general increase in levels of education, have mitigated but have been unable to fully offset trends of this kind.

Adverse developments in the economy and in labour markets have been a major factor in generating the debate about intergenerational equity. The issue, however, is not that the elderly, viewed overall, are receiving too much, but that many of the young are having an increasingly difficult time. What has taken place is in effect a reversal of the traditional North American paradigm, in which each generation was expected to attain higher income levels than its predecessor, with a concomitant growth in overall social well-being.

Whether this situation will be permanent or is merely transitory is a matter of much debate. There is no shortage of economists who hold that all will come right in the future. The fact that some have been saying this for many years does not mean they will not be proven right this time. But in the meantime governments are faced with serious problems.

Unfortunately, policy makers are largely at a loss to know what actions to take. They are short of money. They are also constrained from many forms of intervention by international trade agreements and the high mobility of capital. Aggressive measures to redress growing

inequalities in incomes, for example, carry a risk that they will drive investment out of the country.

Most fundamental of all is the problem that there is today no agreed diagnosis of what has caused the various adverse trends affecting the labour force. There are any number of competing theories, about unemployment, polarization, and slow economic growth, but there is no broadly accepted body of analysis that could provide governments with a basis for confident action. The past two decades have provided more than a little evidence that budget deficits are not the answer to unemployment. Similarly, the limitations of measures such as industrial development grants and regional development programs are now well known, while multi-billion make-work programs are now simply unaffordable. All of this leaves governments in a quandary. They are under pressure from the public to deal with unemployment, but while they recognize the need to "do something," it is far from clear what that "something" should be. The answer to this question will not be found tomorrow.

And this brings me to my final point. There has perhaps never been a time when governments were more in need of careful assessments and creative applications of data to assist them in dealing with complex and demanding social issues. Of these issues, intergenerational equity is one, but only one. For the foreseeable future, governments with their heavy burdens of debt will have only limited resources at their disposal. If they are to make effective use of their limited resources, they are going to need the best advice they can possibly get. And the basis for such advice is the kind of analysis that is presented in this book.





# Contributors

---

**BOB BALDWIN**  
Canadian Labour Congress  
2841 Riverside Drive  
Ottawa, Ontario K1V 8X7  
(613) 526-7408  
bbaldwin@clc-ctc.ca

**PAUL BERNARD**  
Département de sociologie  
Université de Montréal  
Montréal, Québec H3C 3J7  
(514) 343-6632  
bernardp@ere.umontreal.ca

**JEAN-MARIE BERTHELOT**  
Analytical Studies Branch  
Statistics Canada  
Ottawa, Ontario K1A 0T6  
(613) 951-3760  
berthel@statcan.ca

**JOHANNE BOISJOLY**  
Département des Sciences Humaines  
Université du Québec à Rimouski  
Rimouski, Québec G5L 9B4  
(418) 723-1986 ext. 1687  
boisjoly\_johanne@uqar.quebec.ca

**MILES CORAK**  
Analytical Studies Branch  
Statistics Canada  
Ottawa, Ontario K1A 0T6  
(613) 951-9047  
coramil@statcan.ca

**LORI CURTIS**  
Faculty of Medicine  
Dalhousie University  
Halifax, Nova Scotia B3H 4H7  
(902) 494-7043  
lori.curtis@dal.ca

**PATRICE DE BROUCKER**  
Institutions and Social Statistics Branch  
Statistics Canada  
Ottawa, Ontario K1A 0T6  
(613) 951-3999  
debrpat@statcan.ca

**MARTIN D. DOOLEY**  
Department of Economics  
McMaster University  
Hamilton, Ontario L8S 4M4  
(905) 525-9140 ext. 23810  
dooley@mcmail.cis.mcmaster.ca

**DAVID FEENY**  
Pharmacy and Pharmaceutical Sciences  
University of Alberta  
Edmonton, Alberta T6G 2N8  
(403) 492-2234  
dfeeny@pharmacy.ualberta.ca

**NICOLE FORTIN**  
Département des sciences économiques  
Université de Montréal  
Montréal, Québec H3X 3J7  
(514) 343-2400  
fortin@crde.umontreal.ca

**ANDREW HEISZ**  
Analytical Studies Branch  
Statistics Canada  
Ottawa, Ontario K1A 0T6  
(613) 951-3748  
heisand@statcan.ca

**CHRISTIAN HOULE**  
Human Resource Development Branch  
Statistics Canada  
Ottawa, Ontario K1A 0T6  
(613) 951-3927  
houlchr@statcan.ca

**LAVAL LAVALLÉE**

Vestimetra International Inc.  
6268 de Vimy  
Montreal, Quebec H3S 2R3  
(514) 341-0313  
info@vestimetra.com

**TAMARA KNIGHTON**

Labour and Household Surveys Branch  
Statistics Canada  
Ottawa, Ontario K1A 0T6  
(613) 951-7326  
knigtam@statcan.ca

**ARTHUR KROEGER**

245 Springfield Road  
Ottawa, Ontario K1M 0L1  
(613) 745-8222

**CÉLINE LE BOURDAIS**

Institut national de la recherche scientifique-  
Urbanisation  
Montréal, Québec H2X 2C6  
(514) 499-4062  
celine\_lebourdais@inrs-urb.quebec.ca

**SOPHIE LEFEBVRE**

Analytical Studies Branch  
Statistics Canada  
Ottawa, Ontario K1A 0T6  
(613) 951-5870  
lefosop@statcan.ca

**ELLEN L. LIPMAN**

Department of Psychiatry  
McMaster University  
Hamilton, Ontario L8N 3Z5  
(905) 521-2100 ext. 7369  
lipmane@mcmaster.ca

**SUSAN A. McDANIEL**

Department of Sociology  
University of Alberta  
Edmonton, Alberta T6G 2H4  
(403) 492-0488  
susan.mcdaniel@ualberta.ca

**NICOLE MARCIL-GRATTON**

Département de la démographie  
Université de Montréal  
Montréal, Québec H3C 3J7  
(514) 343-5661  
marcilg@ere.umontreal.ca

**DOMINIQUE MEUNIER**

119 Val d'Amour  
39380 La Loye  
France  
dominique@ceps-nt1.ceps.lu

**CAM MUSTARD**

Institute for Work & Health  
250 Bloor Street East, Suite 702  
Toronto, Ontario M4W 1E6  
(416) 927-2027  
cmustard@iwh.on.ca

**RENÉ MORISSETTE**

Analytical Studies Branch  
Statistics Canada  
Ottawa, Ontario K1A 0T6  
(613) 951-3608  
moriren@statcan.ca

**JOHN MYLES**

Department of Sociology  
Florida State University  
Tallahassee, Florida U.S. 32306  
(850) 644-5418  
jmyles@coss.fsu.edu

**GARNETT PICOT**

Analytical Studies Branch  
Statistics Canada  
Ottawa, Ontario K1A 0T6  
(613) 951-8214  
picogar@statcan.ca

**WENDY PYPER**

Analytical Studies Branch  
Statistics Canada  
Ottawa, Ontario K1A 0T6  
(613) 951-0381  
pypewen@statcan.ca



# Chapter 1

## Introduction

MILES CORAK

---

The well-being of children touches many dimensions of public policy, and has in fact risen higher and higher on the agenda of all governments. Indeed, it is increasingly a matter for all Canadians for at least two reasons. The first has to do with the fact that labour markets over the course of the last two decades have changed dramatically in ways that are generally perceived to be detrimental to the young. It is often suggested that we are witnessing, for the first time in generations, the coming of age of a group that cannot expect to attain a higher standard of living than their parents. The second reason has to do with a concern for the children of this generation, since it is often assumed that experiencing low income as a child may predispose individuals to a lifetime of low income.

The research summarized in the chapters of this book sheds light on these two themes: how changes in labour markets affect the standard of living of families with children; and how social institutions that redistribute income and well-being intergenerationally operate to ultimately determine the long-term status of children. Just how have younger cohorts fared relative to other groups in what appears to be a more turbulent labour market? To what extent, and how, have their families and public institutions supported them? Have people from well to do families fared better? Those from lower income families worse? More generally, how are economic and social status transmitted between parents and their children? Is the labour market a rigidly stratified market in which higher income parents pass their economic status on to their offspring, and in which those from lower income families are trapped in a cycle of low-income? Or is there a great deal of fluidity, rewarding individual ability and motivation regardless of social and economic background? Besides income, what other aspects of a child's background are important in this process, and what role do

income transfers, and the education and health care systems play?

It is surprisingly difficult to find definitive answers to these questions, yet they are central to the formation of government policy. The objective of this book is to contribute to this search, to highlight some of the important information gaps, and to foreshadow some of the directions statistical agencies and policy makers might consider exploring. The major message to emerge is that the future of Canada's children is both a good news, and a bad news story. Labour markets have changed dramatically, and on average it is now more difficult to obtain a strong foothold that will lead to increasing prosperity. Many young Canadians, however, are well prepared by their family and community backgrounds to deal with these new challenges, and as young parents are in a position to pass this heritage on to their children. However, this has not been the case for an increasingly larger minority, a group whose children in turn may face greater than average challenges in getting ahead in life.

### 1. Overview

The authors of Chapters 2, 3 and 10 chart the degree of turbulence in labour markets, and how Canadians, particularly the young, have responded to these changes. In Chapter 2, Picot, Myles and Pyper document developments in the economic status of four generations since the early 1970s: children, young adults, the older working age population, and the elderly. Their analysis paints a broad picture of developments across generational lines, and offers an overview of the relative standing of children. How has the labour market treated each of these groups? And how have they coped with the changes in recent decades? The authors answer these questions by examining trends in low-income, and illustrating the degree to which social transfers have

buffered each of the groups from labour market turbulence. They also examine how families have adapted to these changes, the degree to which these responses have reduced the risk of low-income, and the extent to which they can continue to reduce this risk in the future.

Morissette focuses on the declining labour market status of young men in Chapter 3, examining trends in employment, earnings, wage rates, and the resulting chances of escaping low-income. Among other things he undertakes a detailed cohort analysis that contrasts the experience of men of various ages who came on to the labour market in the mid-1980s with those in similar age groupings who came on to the market in the mid-1970s. By following these respective cohorts for a period of up to ten years he is able to determine the extent to which the life-time earnings trajectory has changed in a permanent way. He also examines the length of time these groups can expect to spend in low-income.

Meunier, Bernard, and Boisjoly present in Chapter 10 a complementary study that deals with three related aspects of the living arrangements of the young: housing and cohabitation; schooling; and work patterns. Paying particular attention to the changes that took place during the 1980s, they assess the extent to which moving away from home is delayed, the extent to which the transition to independence is characterized by a host of other changes, and the differences between young men and women.

The labour market outcomes of the young are related to their family background in Chapters 4 and 5. This research assesses the degree of equality of opportunity in the labour market during these turbulent times. To what degree and how have the young been prepared to become self-sufficient and successful adults? Will past and present inequalities be transferred to the next generation? Or, to put the issue in the way that Fortin and Lefebvre do in the opening sentences of Chapter 4, "Will the children of high income families achieve equally high income? Will the children of low income families become low income adults?"

Fortin and Lefebvre's objective is to accurately estimate the correlation between the incomes of adults and the incomes of the families they were raised in. Their focus is on father-son and father-daughter income correlations, and how they have changed through time. They also offer some evidence on how both of these

correlations vary across the income distribution by tabulating what fraction of individuals raised in low-income families go on to have low-income as adults, and conversely what fraction of individuals raised by upper income families remain at the top of the income distribution in the next generation.

Corak and Heisz develop this theme further in Chapter 5. While concerned with the degree to which being raised in a low-income family may permanently scar children, they also address the extent to which low-income *per se* contributes to disadvantage, or is a reflection of other underlying factors. They do this by examining three broad factors influencing labour market outcomes of children: the amount and composition of the father's income; the characteristics of the neighbourhood; and the structure of the family.

These two chapters are broad overviews of intergenerational relationships, but they do not address the underlying processes in full detail. They might also be considered to apply to a best case situation: families in which the father is present. The remaining analysis, Chapters 6 through 9, attempts to fill in some of the details and omissions by examining just how families and communities prepare children for adulthood, and what role income plays in this process. The authors of Chapter 6 deal with the relationship between parental separation and divorce and the marital and fertility decisions of children; those of Chapter 7 examine how income and lone parenthood are related to psychiatric and social problems among children; in Chapter 8 the education of parents and the parenting strategies they adopt are related to the educational decisions of their children; and in Chapter 9 the authors assess the degree to which maternal education and family income influence the health care received by infants.

Le Bourdais and Marci-Gratton in Chapter 6 note that the long-term economic well-being of children is related not only to how much income their parents had to raise them, but also the social attitudes that they passed on. In particular, they note that the current generation of youths are the first to be raised in an era of less stringent attitudes and legislation towards divorce, and contrast the marital decisions of children whose parents divorced or separated with those whose family environment was stable. Do the children of divorced parents have a higher likelihood of experiencing marital instability in their turn? Do they have a greater tendency to forego marriage altogether and prefer cohabitation? Do they bear



more children at a young age? Given that the risk of low-income among children is strongly related to lone-parenthood, their study helps to pin down the extent to which young Canadians may be predisposed to raising children in economically deprived circumstances as a result of their inherited “social capital.”

With this in mind, Chapter 7 explores the potential impact of lone-parenthood on the well-being of young children. Dooley, Curtis, Lipman, and Feeny examine a host of important behaviours reflecting that children get a troubled start in life. These are grouped into three broad categories: psychiatric disorders, poor school performance, and social problems. They assess the relative role played by lone-parenthood and family income in the onset of these problems, and the degree to which higher income compensates for the absence of a parent. Their data also permit a limited assessment of the change in the incidence of the various behavioural problems from the early 1980s to the early 1990s.

The background and child rearing strategies of parents come under further scrutiny in Chapter 8 by de Broucker and Lavallée who examine the educational outcomes of the young as a function of their family background. Since educational attainment is an important determinant of economic and social standing, the authors examine the relative influence of parents and the educational system in determining the schooling obtained by both a recent and an older cohort of men and women. Among other things they are able to relate the education of these groups not only to the education levels of their parents, but also to a host of parenting strategies dealing with educational support.

In Chapter 9 infant health during the first year of life is examined by Knighton, Houle, Berthelot, and Mustard who focus on the relative roles of family income and maternal education in how newborns are treated by the medical system, the type of care they receive, and the cost implications. Their analysis is based upon a unique data set that links socio-economic information from the Census to the medical history of a group of newborns in Manitoba during the mid-1980s. Since the first few years of life are often considered crucial to the development of children this study is important because it illustrates the relationship between parental socio-economic status and the type of care newborns receive.

Using the findings of the research in Chapters 2 through 10, Chapter 11 contains two contributions, one by Susan McDaniel and another by Bob Baldwin, that outline the implications for policy makers, the information gaps that remain, and that offer some directions for future research.

## 2. Major Findings

**Labour market conditions have deteriorated for the young, particularly men, with the result that a much higher proportion are now part of the so-called “contingent” workforce. Their earnings capacity seems to have permanently deteriorated during the 1980s.**

Fewer young men participate in the labour market; fewer are employed; and a greater proportion are unemployed. In fact, over one-third of men aged 17 to 24 can be classified as belonging to the contingent workforce: either unemployed, employed involuntarily part-time, or holding non-permanent employment. Even the types of jobs held by full-time workers has changed. They are now more prevalent in lower-paid sectors like consumer services rather than in manufacturing and the public service. Up to 30% of young men in 1981 worked full-time in manufacturing; by 1995 this was down to 23%. The numbers are almost reversed in consumer services: 23% worked in this sector in 1981, but 33% in 1995. Further, the fraction of full-time workers in union jobs has fallen by half (from 33% to 15% between 1981 and 1995).

The upshot of all of this is that young men (working full-time, and year round) earned in 1994 the same as their counterparts in 1969 (in real terms). In contrast, 45 to 54 year olds are earning over 30% more than their counterparts of 25 years ago. The earnings capacity of young men grew during the early to mid-1970s, began to deteriorate afterward, dropped tremendously during the 1981-82 recession, with no recovery since. (See Figure 3.1 in Chapter 3.) Young men coming onto the labour market between 1984 and 1993 earned almost 11% less over this period than young men in the previous decade; in contrast, 35 to 44 year olds earned about 4% more (Table 3.7). These changes reflect a pervasive decline in the earnings capacity of the young regardless of industry, occupation, union status, and even the prevailing macro-economic climate (that is higher overall unemployment rates). Even if unemployment had been the same, youths in the 1980s would have started their

careers with earnings that were almost 20% lower than their counterparts ten years earlier. In essence, there has been a permanent deterioration in the earnings capacity of young men.

**This has raised the risk that they and their children will fall into a state of low-income.**

The rate of low-income, based entirely upon market sources, among families with children 14 years of age or younger was 20% up to about the early 1980s, but rose to over 25% by the mid-1990s. At the same time individuals over the age of 45 experienced no changes in the chances that they would obtain low market incomes (Figure 2.1).

**Government transfers went a long way in preventing the higher risk of low market incomes from being transferred into low family incomes.**

Even though the labour market earnings of families with young children fell during the 1980s and early 1990s, total family income—because of a substantial rise in the contribution of government transfers—did not. The labour market was the source of about 65% of total family income in the early 1970s, but about 30% in the mid-1990s. At the same time, transfers made up less than 40% of total family income in 1973, but over 60% by the mid-1990s. As a result low-income rates after taxes and transfers have remained essentially constant at about 15%. (See Figures 2.1 and 2.2.)

**Another important factor shielding children from low-income has to do with changes in the marital and fertility behaviour of young adults, but by the late 1980s or early 1990s this buffer had reached its limit.**

Throughout the 1970s and 1980s young people put off marriage and childbearing, and increased their earning power by obtaining more education. In addition, women entered the labour market in ever greater numbers and the number of two-earner couples rose. A related strategy to cope has been an increased tendency to remain or return to the parental home. For example, in 1981 about 26% of 23 and 24 year olds lived with their parents, while in 1990, 40% did so. Furthermore, those who left home were less likely to be living as couples. To cite one example from Chapter 10, almost 55% of 21 and 22 year olds who were not living with their parents lived as couples in 1981, but only 39% did so in 1990 (Table 10.2). Part of the reason has to do with the rising number of young who spend most of their time in

schooling, up over 13% during the 1980s. In short, the living arrangements of young adults changed dramatically.

These changes have helped to contain the rate of low-income among children. However, in contrast to the 1970s and 1980s, changes in demographic and labour supply behaviour during the 1990s have actually exacerbated the risk of falling into low-income. For example, the proportion of children in families of three or more children fell from 48% in 1973 to about 30% in 1988, but has changed little since then; the proportion of children in households with at least one parent holding a university degree more than doubled from 8.3% in 1973 to about 18% in 1988, but has not changed since; finally, the proportion of children in two parent/two earner families went from 47% in 1973 to over 66% in 1988, but fell to 63% in 1995 (Table 2.1). Indeed, a growing number of children live in households that are less able to cope. While only 4.6% of children under the age of 14 lived in lone-parent households in 1973, this proportion rose steadily to reach almost 13% during the mid-1990s. Those people who could adapt to turbulent labour markets did so—either by putting off marriage, staying in their parental homes longer, attaining higher education, or by having a partner not previously working enter the labour market. But at the same time for others who could not cope or in which the stress of doing so proved too great, relationships either broke up or failed to form in a lasting way, with the result that the incidence of lone parenthood and low-income rose. As Picot, Myles and Pyper state, “future gains in reducing low-income among children will depend mainly on improved earnings opportunities for their parents...and/or improved social transfers” (Chapter 2, p. 20).

**The labour market outcomes of the young are only loosely tied to the incomes of the families they were raised in. Much more than money matters in determining how children get ahead in life.**

In fact, the Canadian labour market seems to be characterized by more intergenerational mobility than that of the US or UK. Fortin and Lefebvre find that the correlation between father and son incomes is less than 0.2; between fathers and daughters it is slightly higher, but in all cases the correlations are considerably lower than the generally reported figure of 0.4 for the US and UK. In this sense, Canada is more like continental Europe than the Anglo-American economies. The tie to parental income is even looser for the cohort



born after 1955, the period corresponding to the expansion of the welfare state and the development of a universally accessible post-secondary system (Table 4.4). More specifically, those born to fathers at the bottom of the income distribution are slightly more likely to attain middle income than to remain in the bottom. Those born to fathers in the top of the income distribution, however, are most likely to remain in the top.

In fact, the composition of the father's income, not just the amount, has an influence on child outcomes. Market sources of income—earnings, self-employment income, and asset income—are positively associated with the eventual incomes of their children. Non-market sources, such as unemployment insurance and other transfers, either are not, or are negatively related, to child outcomes (Tables 5.3 and 5.4). The fact that a dollar of parental income has different consequences for children depending upon how it was obtained may be a signal that other unobserved attributes of the family are important. In addition, Corak and Heisz find that neighbourhoods, peer groups, or in general the networks available to parents are important indicators of child outcomes. An often used measure of this “social capital” inherited by children, the number of residential moves experienced during the early teen years, is strongly associated with their adult incomes. Children who move two or more times over a five year period, and hence have less of a chance to develop their “social capital,” are much less successful in the labour market than their counterparts from families with an equivalent overall income level, but who did not move (Figure 5.3). Picking up on a theme raised in Mayer (1997) the authors suggest that if “factors other than low income are the true influences on a child's future prospects, then a policy thrust involving more than simply transferring money to parents is in order.” (Chapter 5, page 65.)

**A widely-accessible and high-quality education system certainly plays a role in determining the large degree of intergenerational income mobility for the young. But even so, the educational and occupational background of parents are equally important in how children access the resources society makes available to them.**

There has been substantial upward educational mobility, with over 50% of Canadians having more education than their parents and only 17% having less (Table 8.2). Nevertheless, the probability of

attaining a post-secondary education varies significantly with parental education. Those whose parents had a post-secondary degree or diploma have about a 56% chance of also getting one; those whose parents received only secondary education have about a 40% chance; and those whose parents did not complete a secondary degree have only a 22% chance of attaining post-secondary status.

These patterns are the same for the generation just completing their education as they are for the generation who completed their education before widely accessible post-secondary institutions were put into place. The one exception to this was the young of highly educated parents, who are even more likely to go on to get post-secondary qualifications than their older counterparts (almost 70% do so, compared with about 60% of the older group). See Figure 8.1. This pattern is even more marked for those whose parents had university degrees. In fact, this is increasingly the case, and implies that access to post-secondary degrees is becoming more polarized.

In addition, the authors of Chapter 9 find that maternal education plays an important role in how infants start life. Almost 80% of mothers with the least education experienced short gestation periods: over 60% gave birth to low weight babies, versus less than 40% of mothers with the highest education (Table 9.1). Furthermore, infants born to mothers with low education are much more likely to receive treatment care services during the first year of life, and less likely to receive preventative care services. The latter is often considered to be an important key to long-term health, and as such the children of these parents are at higher risk of poor health. In fact, their hospital admission rates are almost twice as high as those for better educated groups, while ambulatory preventative care rates are only 60% those of other groups. As in the case of the post-secondary education system, access and delivery of health care services of most long-term benefit to children is skewed toward those with better educated parents. Maternal education seems to be the important determinant of how health care is accessed; household income levels do not seem to be as important (Table 9.3).

However, an important limitation of the research in Chapter 9 is that lone-parent status is not simultaneously controlled. Maternal education may be a proxy for lone-parenthood. Indeed, this general limitation applies to all of these studies, including Chapters 4 and 5.



**Lone parenthood seems to be a very important correlate of how children get a start in life, and it may be that it cannot be compensated for by higher household incomes.**

About 43% of children who are raised in low-income lone-mother families experience at least some psychiatric disorders, or schooling and social problems, versus only 24% of those in a similar income situation but living with both parents. Higher income seems to only partially compensate for the absence of a father, as the incidence of at least one of these problems is 32% among children in lone-mother families above the low-income cutoff. In addition, the rate for children in low-income two-parent families is almost the same as for their counterparts above the low-income cutoff: 24% versus 20% (Table 7.1).

In this regard it is important to note that two-thirds of the children in lone-mother families live below the low-income cutoff, while only 15% of those in two-parent families do so. Lone-mothers also tend to have lower levels of education, and to be younger than their counterparts. Despite these differences it seems that children from lone-mother families face a higher risk of psychiatric disorders—be it hyperactivity, conduct disorder, or emotional disorder—regardless of family income, and other variables. The mother's education level, for example, does not seem to make a major difference, but having a young mother does raise the incidence of these problems, which also tends to be higher for boys than for girls. The probability on average of experiencing one of these problems is about 15%, but rises to 25% for those from lone-mother families (holding all other things constant). Changes in the family income from below to above the low-income cutoff has no discernable impact (Table 7.3). The same conclusion applies to schooling problems (repeating a grade, poor performance, or frequent social problems). The risk of one or more of these problems is 20% for a representative child from a two-parent family, but 34% for a child with similar characteristics but from a lone-mother family.

The authors of Chapter 7 suggest that there may also have been a tendency for the risk of psychiatric problems among children to increase between 1983 and 1993, but their most important overall conclusion is "that lone-mother status is the variable most consistently and significantly associated with ... psychiatric, schooling and social outcomes." (Chapter 7, page 116.)

**Familial instability echoes through the generations. Young adults whose parents went through a separation or a divorce have in turn higher rates of family instability, and are more likely to be lone-parents.**

Parental separation and divorce may have long-lasting impacts on family formation patterns in the next generation. Le Bourdais and Marcil-Gratton summarize the major findings of Chapter 6 by saying that "parental separation or divorce tends to be positively related to the likelihood that offspring will experience cohabitation while decreasing the chances of directly marrying. It also tends to be related to early, pre-union or premarital childbearing among young women, and to increases in the risk of union dissolution, at least for married men." (Chapter 6, page 91.) For example, after controlling for a host of other characteristics the probability of cohabitation before the age of 25 is more than 70% higher among young adults whose parents were separated or divorced, while the probability of marriage is significantly lower (particularly among women, where the rate is 40% lower). In addition, women who experienced the separation or divorce of their parents are almost two times as likely to give birth to a child before their 20<sup>th</sup> birthday than those from intact families. They are also almost twice as likely to be lone-mothers (Table 6.2).

The process leading to these outcomes may be complex. In particular, it is likely that familial instability may influence a girl's education attainment, which in turn directly influences the chances of lone-motherhood. Finally, marriages that do occur are more likely to break-up if there is a history of separation or divorce. This is particularly so among men, who are about three times more likely to see their marriages fall apart if they also experienced the breakup of their parents' marriage (Table 6.3).

### 3. A Synthesis and Directions for Future Research

One possible synthesis consistent with these eight findings would begin by recognizing that three fundamental institutions determine the well-being of children, and their preparedness for adult life: the market, the state, and the family. The scope and role of these institutions has changed dramatically over the course of the last two decades, and some of these changes seem to have been triggered by important labour market developments. In particular, labour markets

changed during the 1980s such that the permanent income of the young and especially young men declined on average by as much as 10%.

Unlike in the United States, government income transfers insulated Canadian children from the worst aspects of these adverse labour market developments to the point that the incidence of low-income among children in Canada did not increase.<sup>1</sup> Other government institutions were also important. A widely accessible and high quality system of higher education permitted many young people to increase their credentials. Indeed, the labour market was characterized by a good deal of equality of opportunity despite many other changes. While young adults from the highest income families were most likely to fare the best, those from the lowest income families were still more likely to move up the income ladder than stay at the bottom. Overall, the correlation between income and family background is relatively weak, consistent with a labour market in which individuals are paid according to their skills and motivation. However, since the underlying labour market changes were long-lasting, budget deficits at all levels of government rose to levels deemed to be unsustainable.

The family also played an important role in supporting young adults. The most obvious example of an increased intergenerational transfer from parents to children was the tendency of young adults to spend a longer time at home. Family formation among the young was also changing in other important ways. Living with parents went hand in hand with staying longer in school, delayed coupled formation, and declining fertility. All of this, however, represents the best case scenario: young people most likely to have followed this path tended to come from intact families and families with highly educated parents.

In contrast, individuals whose parents had separated or divorced were more prone to cohabitate, have children out of wedlock, or if they did marry, to face a greater risk of a breakup. Further, they were more prone to have behavioural and schooling problems, particularly the boys. Young adults were more likely to earn lower incomes if: they had experienced frequent residential moves (and by implication school changes); their parents either had lower levels of education or did not adopt the best parenting strategies or attitudes; and if their parents relied on non-market sources of income. Obviously, all of these risk factors are higher for those from families with divorced or separated parents.

Coming onto a more hostile labour market with a social capital endowment of this kind implies a greater likelihood of having low income, and less of a tendency to respond by getting more education, or by putting off childbearing. With lower incomes among men and with the greater need to participate in the labour market among women, the stress on already fragile relationships may have increased the likelihood that the next generation of children will be raised in lone-mother families.

Now this story, although informed by the findings in the following chapters, makes a number of suppositions that call for further research.

- [1] What are the origins of the dramatic changes in the labour market, and how did they place such a large burden upon the young? The causes of greater labour market turbulence are still not well understood, but may be related to long-delayed adjustments to the decline in productivity growth that began in the early 1970s. Many have hypothesized that these shocks may have been aggravated by the introduction of information based technology (particularly the personal computer) and the globalization of capital and product markets. (See for example, Osberg, Wein, and Grude 1995, and Wood 1994.) There is certainly still a good deal of controversy about the impacts computer based technologies and globalization have had on the polarization of incomes here (and in other OECD countries). Whatever the causes, however, it is clear Canadian labour market institutions structured the adjustments to these shocks in a way that put heavy burdens upon the young, and particularly upon young unskilled men. What aspects of labour markets were responsible? Are they immutable? Though these questions are beyond the scope of the following essays, they are nonetheless central to policy development.
- [2] Is the relationship between lone-parenthood and detrimental child outcomes causal? It would certainly seem to be the case that children from lone-parent families on average have more behavioural and social problems, and will ultimately attain lower levels of education and income. At the same time, however, it may not be appropriate to argue that family status is the cause of these patterns. Such a comparison does not necessarily answer the question of how



children from lone-parent families would have fared had **their** parents stayed together. In fact, it may well be that some of these children are better off as a result of the breakup. An extreme example of such a situation might be a family in which children witness or experience physical or mental abuse. If abuse of this sort, or the stress associated with it, is the underlying cause of how children fare, then the breakup of a marital relationship simply represents a signal or symptom of this deeper problem. The extent to which lone-parenthood actually plays a causal role is still very much a question in need of more research.

- [3] A related issue is the extent to which money, and in particular transfers from the state, improve child outcomes. Does money matter? This is particularly germane to the development of policy since one of the main tools available to governments is the transfer of more funds to families with children. For example, the suggestion that market sources of the parents' income are positively associated with the future earnings of the children, while non-market sources are negatively associated, might be taken to imply that there are limits to the beneficial impact of government transfers. This, however, leaves many questions unanswered. Is this a true causal relationship? If it is, higher transfers could even contribute to lower educational attainment among children, poor labour market outcomes, and imply an intergenerational transmission of reliance on government transfers. But this assumes that all factors determining these outcomes are being controlled for, particularly factors that may be correlated with the receipt of transfers, a task that is difficult with many of the available data sets. As such, there is a strong risk of overstating any potentially detrimental effect. More convincing analyses of better data are still needed.

- [4] Both families and communities play an important role in determining how children fare, but just how do they do so? How exactly do families create resilience among children in spite of the income available to them? What is the role of the community and "social capital" in this process? These would seem to be crucial questions to answer since many children from low-income or lone-parent families go on to become successful adults. The tendencies unmasked in research are

often "average" effects, and say little about the variety of experiences or the causes of these variations.<sup>2</sup> To understand these variations will require a more detailed understanding of the internal workings of the family, of how resources are shared and decisions made within it, and of the system of supports in the community. Role models, peer groups, and the characteristics of neighbourhoods are part of this broader community role, but research for policy purposes needs to go beyond these and examine how families access the resources made available by the state. For example, the availability of a universal education and health-care system does not imply they will be used in the most effective ways by some families.

## 4. Conclusion

The future of Canada's children is both a good and a bad news story. Many children are well prepared by family, friends, and public institutions, and have fared well in spite of important labour market changes; others are not so fortunate. The differences between these groups are a concern in and of themselves, but also because they are likely to echo into the next generation. The children of today's young adults are likely to enter a virtuous or vicious circle as advantages and disadvantages are passed on. Is this fair? Do we know enough about intergenerational dynamics to do something about it?

These are central but very difficult questions to answer, and the last word belongs to Susan McDaniel and Bob Baldwin in Chapter 11. They examine, each in their own way, the implications of the research in this book for intergenerational fairness and government policy. McDaniel, in particular, argues that to cast developments over the past two decades in terms of an intergenerational conflict between the current group of elderly and current cohorts of young (and potentially their young or as yet unborn children) would be incorrect and indeed obstructive. She offers a host of issues that need clarification (both theoretical and empirical), examines the degree to which a new generational compact is emerging in Canada, and highlights three alternative policy frameworks for the way ahead.

In his turn, Baldwin offers an admirable checklist of what younger generations should reasonably expect to inherit from older



generations. His analysis begins by relating the research in this book to this checklist, and goes on to point out the important information gaps that continue to exist. He also speculates on the nature of the intergenerational compact linking Canadians, and contrasts society's attitude toward the pension arrangements given to the elderly with the support provided to the young. He concludes by underscoring the importance of the public sector to all of these relationships.

## Notes

<sup>1</sup> This is clear from the work in Chapter 2 in conjunction with that of Blank and Hanratty (1993) who undertake a comparative analysis of the Canadian and US programs of social transfers and how they operated in the two countries during the 1980s. They find that the "primary group that would benefit from the adoption of the Canadian antipoverty system [in the US] is families with children" (p. 219).

<sup>2</sup> A striking example of this point is made by Docherty (1997) who also points out that the "labelling" of children as being part of a high risk group may lead others to change their behaviour, treat them differently, and contribute to detrimental outcomes. The general point is also echoed in the essays by Osberg (1998) and Helliwell (1998).

## Bibliography

BLANK, Rebecca M. and Maria J. HANRATTY (1993). "Responding to Need: A Comparison of Social Safety Nets in Canada and the United States." In David Card and Richard B. Freeman (editors). *Small Differences that Matter: Labor markets and Income Maintenance in Canada and the United States*. Chicago: University of Chicago Press.

DOCHERTY, Jane (1997). "Blessed are the poor, for they can be labelled." *Globe and Mail*. June 6.

HELLIWELL, John F. (1998). "What Will We Be Leaving You?" In Miles Corak (editor). *Government Finances and Generational Equity*. Ottawa: Statistics Canada, Catalogue No. 68-513-XPB.

OSBERG, Lars (1998). "Meaning and Measurement in Intergenerational Equity." In Miles Corak (editor). *Government Finances and Generational Equity*. Ottawa: Statistics Canada, Catalogue No. 68-513-XPB.

OSBERG, Lars, Fred WEIN, and Jan GRUDE (1995). *Vanishing Jobs: Canada's Changing Workplaces*. Toronto: James Lorimer and Company.

WOOD A. (1994). *North-South Trade, Employment, and Inequality*. Oxford: Oxford University Press.



## Chapter 2

# Markets, Families and Social Transfers: Trends in Low-Income Among the Young and Old, 1973-95

GARNETT PICOT, JOHN MYLES AND WENDY PYPER

---

Like the members of all developed market economies, Canadians rely for their economic well-being on three main institutions: the market (especially the labour market), their families, and the state (federal, provincial, and local governments). Therefore changes in economic well-being are the result of : [1] economic events that influence the availability of jobs, employment earnings, and other sources of market income; [2] "demographic" events that influence the types of families in which Canadians live (the number of earners, the number of children); and [3] political events that influence the type and magnitude of transfer payments governments provide to individuals and families.

In this chapter we document trends in social transfers, market incomes and family composition from 1973 through 1995, and their impact on the incidence of low-income among four generations: children (new-borns to those 14 years of age), young adults (25 to 34), the older working-age population (45 to 54), and the elderly (over 65).

For seniors, recent trends in low-income are largely the result of developments that took place prior to 1973 (the year our data begins). These developments influenced the low-income rate of seniors over the 1970s, 1980s, and 1990s. The period from the end of the Second World War until 1973 was one of dramatic economic expansion in all Western societies. For the working-age population, the result was high and rising wages and vastly improved living standards relative to any previous generation in history. By the mid-1960s, however, it was evident that the elderly had largely missed the rising tide of post-war prosperity. Higher rates of retirement combined with relatively modest old age security systems in most countries resulted in high levels of low-income among the elderly. As a result, the 1960s brought an unusual period of social legislation aimed at enhancing their economic

security (Myles, 1989). In Canada, the Canada and Quebec Pension Plans (C/QPP) were adopted in 1965 and the Guaranteed Income Supplement (GIS) a year later. It would take almost two decades for the results of this legislative flurry to become apparent however. The first cohort to receive full benefits under the C/QPP turned 65 in 1976.

Similarly, until the 1980s few retiring workers had accumulated much in the way of private pension entitlements. Until the Second World War employer pensions were rare. Pension coverage expanded rapidly up to the 1960s, rose modestly during the 1970s, and then declined somewhat in the 1980s. The first cohorts of retirees to have a significant private pension entered the labour force after the Second World War, and collected benefits in the late 1980s.

We find that in 1973 about 25% of the elderly population still had incomes less than half the median income of the population. By the mid-1980s this figure had fallen to about 10%, and by 1995 to less than 4%. Though by no means affluent—by 1995 the median income of seniors was 87% of the median of all individuals—Canada's seniors had come a long way since the nadir of the sixties.

In contrast, recent trends in low-income among children and working-age adults are the result of developments that have taken place since 1973. During the 1970s, the high rates of growth that benefited working-age families in the 1950s and 1960s began to decline. More significantly, inequality in the distribution of labour market earnings began to rise, especially after 1980 (Morissette, Myles and Picot 1995). One consequence of this development was a substantial decline in the earnings of young adults, exposing them and their children to higher risks of low-income. Until recently, however, and unlike the United States, higher risks were not translated into higher rates. From the 1970s through



the 1980s, the incidence of low-income among the working-age population and their children was remarkably stable, rising during periods of recession but falling again during periods of economic recovery.

We show that this relative stability in low-income rates among children and working-age adults is the result of two developments. First, government transfer payments to working-age families, and especially to working-age families with children, grew substantially. Second, young adults changed their patterns of family formation and labour market behaviour in ways that significantly offset the consequences of declining earnings. They began to marry later, had fewer children, and more women went into the labour market. In brief, families and governments responded to the new economic risks evident in the labour market. But this is a two way street, and trends in the labour market may have partially been in response to changes in the transfer system and other policies.

Our results also indicate, however, that the outcome of the recession during the early 1990s may prove to be less benign. Low-income levels rose as recession set in 1990 and then declined modestly through 1994. Unexpectedly, however, the downward trend did not continue through 1995 nor (as preliminary results indicate) through 1996, despite the continuing recovery. One of the reasons for this development is that changes in family behaviour that partially offset declining market incomes in the past have been exhausted or even reversed. In part, this is to be expected: young adults cannot go on increasing the age at which they have their first child or reducing fertility levels indefinitely. In contrast, a decline in labour force participation (especially among men) and two-earner families since 1990 was largely unanticipated.

A second development of the 1990s that may affect future trends in the incidence of low-income is a result of changing trends and policies. The percentage of unemployed Canadians receiving unemployment benefits fell from 86.8% in 1990 to 48.1% in 1996. Income Assistance rates in many provinces have been reduced, in some cases, significantly (National Council of Welfare 1997). Potentially offsetting these trends for families with children has been the enrichment of the Child Tax Benefit (now known as the National Child Benefit). On balance, 1995 results show a small decline in average transfer payments and preliminary 1996 data suggest a continuation of this trend (Statistics Canada 1997). But changes

to the tax-transfer system are too recent to draw strong conclusions about their consequences. Nor are we able to assess the possible behavioural response to these changes in the form of increased work effort among those affected by the new social politics of the 1990s.

In summary, from the 1960s to the 1990s trends in the incidence of low-income among the generations have changed substantially. Because of their changing relation to the labour market, the elderly were the main, though not exclusive, focus of social policy during the 1960s. Since the 1980s, rising inequality in the labour market has directed attention to new economic risks faced by the younger generations and especially by children. The purpose of this chapter is to inform the current discussion with an empirical-historical description of these developments.

## 1. Social Transfers, Market Income, and Low-Income

Our data are from the Survey of Consumer Finances (SCF) economic family file for the years 1973, 1981, 1986, 1988, 1990, 1991, 1994 and 1995. We use a "50 percent median" low-income measure (or LIM) to document trends in low-income. To compute this rate, a per capita income for each family is calculated and assigned to each individual family member. This per capita value is then adjusted to account for economies of scale associated with family size and composition, leading to an "adult-equivalent adjusted" family income for each individual. Our measure of low-income is one-half of the median adult-equivalent adjusted income, where the median is computed for all individuals (not families) in Canada. More details are offered in the Appendix.

We begin by comparing rates of low-income based on market incomes alone (before transfers and taxes) with rates of low-income based on final disposable income (after transfers and taxes). Trends in the pre-tax/pre-transfer rate are often thought of as indexing the changing "risk" of low-income faced by individuals and families in the labour market and the difference between the two rates as measuring the "effectiveness" of the tax-transfer system in reducing this risk (McFate, Smeeding and Rainwater, 1995). Clearly, however, assessing the causal role of changes in labour markets and social transfer systems in shaping the economic well-being of Canadians is more complex than this simple

accounting suggests. In particular, behavioural response to changes in the transfer system can influence the level of market earnings, a topic which we will address.

Trends in low-income by age cohort are highlighted in Figure 2.1. In the case of the elderly these trends are largely the product of economic and policy developments that occurred well before 1973. In Canada, as in all Western countries, the relative economic status of the elderly declined continuously from the end of the Second World War through the 1960s, when old age poverty rose to the top of the political agenda.<sup>1</sup> This was mainly the result of increasing retirement in the absence of a well-developed retirement income system. In 1946, just following the war, almost half (48%) of men over 65 were still in the labour force. By 1973, this had fallen to 18% and the low-income rate among seniors before taxes and transfers was 60%, a level that has remained relatively unchanged. In contrast, the post-tax/post-transfer low-income rate has fallen continuously since 1973, from 25% to less than 4% in 1995.

The distance between the two lines in the Panel of Figure 2.1 describing the 65+ group reveals the remarkable change in the difference between the incidence of low-income among the elderly before and after taxes and transfers. This difference is 35 percentage points in 1973, but rises to 55 percentage points in 1995. These changes are largely the result of policy reforms of the 1960s—the adoption of the Canada and Quebec Pension Plans (C/QPP) in 1965 and the Guaranteed Income Supplement a year later—and an expansion in private pension plan coverage. Although the average income received by seniors still falls below that of the rest of the population (87% of the median in 1995), it too was up considerably from 1973 (when it was 72% of the median). (See Appendix Table 2A.1 for more details.)

Whereas the market-based low-income rate among seniors has been relatively stable since the 1970s, it has risen substantially among working-age adults and their children (Figure 2.1). The rising trend is particularly pronounced among children and younger adults. Trends for these two age groups tend to move in tandem since the former are disproportionately the children of the latter. The pre-tax/pre-transfer low-income rate among 25 to 34 year-olds rose from 14% in 1981 to about 19% in 1995, and among children from 20% to 26%. The rate was relatively stable for the middle-aged through the 1980s, but

has risen by a little over two percentage points during the 1990s.

Changes in market-based low-income rates among working-age adults and their children may occur because of changes in the labour market and fertility behaviour of young adults or both. The declining fortunes of young working-age adults and their children since 1980 are mainly the result of changing markets rather than changing families. As is well documented, the relative wages and earnings of younger adults fell substantially after 1980 (Morissette, Myles and Picot 1995, Picot 1998, and in Chapter 3 by Morissette). And as we show in a later section, changes in family structure tend to alleviate rather than reinforce the effects of declining wages on the low-income rate.

Despite the rising risk of low-income, actual low-income rates (after transfers and taxes) in these age groups have remained relatively stable. Between 1981 and 1995, the incidence of low-income rose by 1.2 and 1.8 percentage points among younger adults and children respectively, and by less than 1 percentage point among 45 to 54 year-olds. The difference between the low-income rate before and after taxes and transfers rose by 5 percentage points among children over the same period, by 3 percentage points among 25 to 34 year-olds, and by 2.5 percentage points among those 45 to 54.<sup>2</sup> This increase in the gap between the low-income rate based on market income and post tax/transfer income demonstrates the increased role played by the transfer system, certainly up to the early 1990s, in maintaining the incomes of these age groups.

A significant consequence of these changes since the 1970s has been a growing convergence in the sources of income of the low-income population of younger and older generations (Figure 2.2). At the beginning of the 1970s, few older people were employed and low-income seniors depended on social transfers for most (about 90%) of their income. In contrast, social transfers accounted for just over a third of the income of low-income children and adults, with about two-thirds coming from employment and other market sources. By the 1990s, social transfer payments played a much larger role. About 60% of the income received by working-age adults and children in low-income households now comes through the tax-transfer system and about 40% from the market.

Low-income rates are widely watched indicators of social policy performance. By this standard, our results suggest two significant policy

Figure 2.1  
Proportion of Individuals Below 50% of the Median Income:  
Pre- and Post-Tax/Transfers, 1973 to 1995

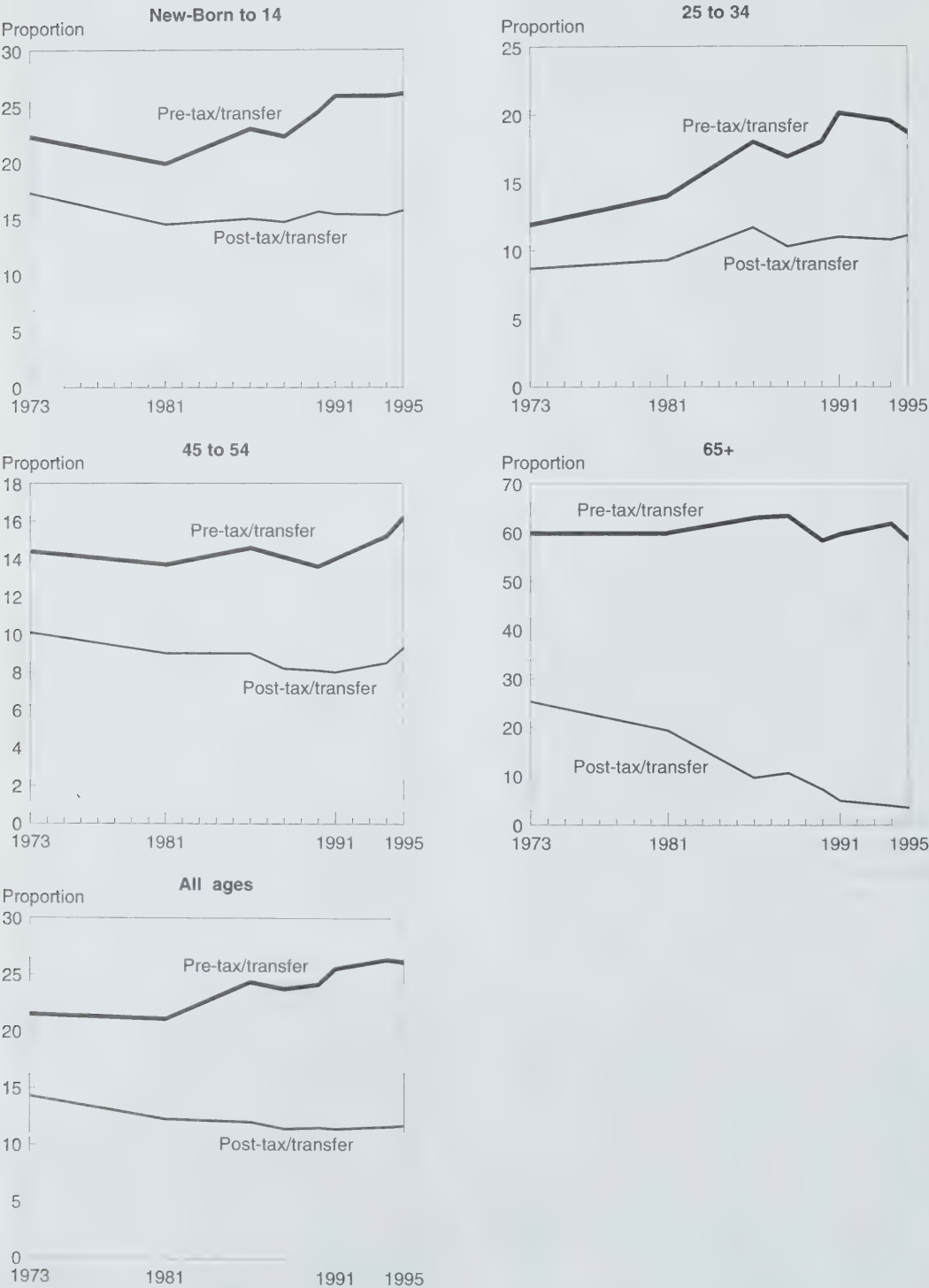
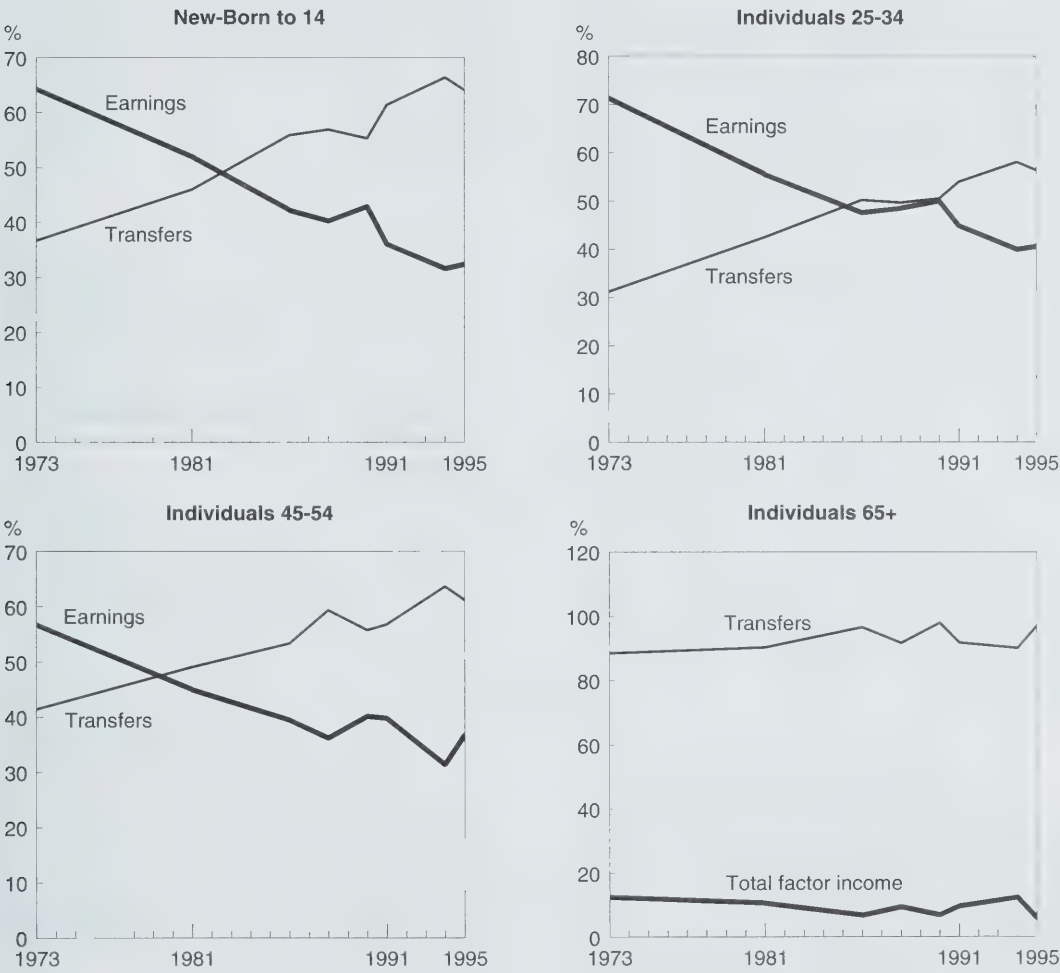




Figure 2.2  
Sources of Disposable Family Income for Different Generations: Persons with Less Than 50% of the Median Income, 1973 to 1995



**Note:** Family income is measured as per capita adult-equivalent income.

achievements of the past quarter century: [1] a significant and sustained long term decline in low-income among seniors; and [2] relatively stable rates of low-income among the working-age population and their children despite the rising risk of low-income in the market. Matters, however, are decidedly more complex than this simple accounting would suggest since the effects of public policy on labour market earnings are ignored. Public policies impact on market incomes in many ways: through their effect on unemployment rates, on wage structures, on opportunities for education and training, and by the disincentives to participate in the labour market created by social transfers. Hence, the results we offer should be regarded as an historical

description of trends in low-income rates rather than a behavioural-causal account of the origins of these rates. Conservative critics of the tax-transfer system will tend to conclude that, by creating work disincentives, social transfers are in fact the cause of rising risk of low-income among working-age adults and their children. Their opponents will emphasize the role of decreasing labour demand for less skilled, lower paid workers combined with inadequate attention to education and training, and more recently, the cut-backs to the transfer system.

In either case, however, the historical record that we have documented is clear and of no small significance. Like most Western nations, Canada

has dramatically reduced the rate of low-income among seniors and like most European countries has stabilized the rate of low-income among working-age adults and their children, at least to 1994. Whether this trend will continue into the future remains to be seen. Low-income rates have generally followed the business cycle. In the 1990s, low-income rates among children and working-age adults rose with the onset of the recession in 1990 and then declined through 1994. Despite continuing recovery, however, low-income rates rose again in 1995 and 1996 (Statistics Canada 1997). There are several possible reasons. First, wages and employment opportunities for low-income adults may have deteriorated despite improving conditions in the economy as a whole. Second, government efforts to restrain the rate of growth in social expenditures (especially in UI and Income Assistance) may have begun to have an impact. Finally, the changing fertility and labour market behaviour that helped offset rising rates of low-income during the 1980s may have changed (Picot and Myles 1996). In future work, we shall evaluate all three hypotheses. Here, we restrict our attention to the third alternative and show that in the 1990s, demographic changes cannot be relied upon to provide solutions to rising risk of low-income.

## 2. Changing Families and the Risk of Low-Income

Social transfers were not the only factor buffering low-income Canadians during the past twenty years. The kinds of families in which Canadians live in 1995 are very different from those of the 1970s and, until recently, these changes have on balance muted the growth of low-income among working-age adults and their children. Since the early 1970s, young adult Canadians have been marrying later, having fewer children, and Canadian women have dramatically increased their participation in the labour market. All of these changes have tended to reduce the low-income rate (particularly among children), and until recently have far outweighed the impact of the rising number of single parent families.

Dooley (1991, 1994a) and Picot and Myles (1996) in Canada, Gottschalk and Danziger (1993) in the U.S. have shown that changing characteristics of families had a significant impact on the incidence of low-income during the 1970s and 1980s. We extend this work into the

1990s. Through the 1980s, changing demographic and labour market characteristics of households generally reduced the risk of low-income among children and young adults. Since the end of the 1980s, however, many of these trends (particularly women's labour force participation) have stabilized and others (the proportion of families with multiple earners) have reversed direction. A number of the more important developments are highlighted in Tables 2.1 through 2.4.

With respect to children:

- [1] The proportion of children in families where the highest earner had a university degree rose from 8.3% in 1973 to a peak of 18.2% in 1986, then fell back to 17.7% by 1995 (Table 2.1). Thus, the earnings power of these families (as influenced by educational attainment) was rising until the mid-1980s but not since.
- [2] The number of children per family fell between 1973 and 1981, resulting in fewer people to share the family income and hence reducing the risk of low-income. But this number has remained more or less constant since that time.
- [3] The proportion of children in families with two or more earners rose significantly between 1973 and 1988 (from 47% to 66%) but then declined to 63% in 1995 as the participation rates of men fell and those of women stabilized.
- [4] The proportion of children in single parent (economic) families rose over the entire period from 4.6% in 1973 to 9.8% in 1988, and 12.7% in 1995.<sup>3</sup>

Overall, these trends reduced the likelihood of low-income among children through the 1970s and much of the 1980s.

The trends among 25 to 34 year-olds are similar to those reported for children, which is not surprising since many of these individuals are the parents of children. Most importantly, the proportion of those 25 to 34 year-olds in family units (including the unattached) with two or more adult earners peaked in 1988 at 63.7% and fell to 59.6% in 1995. The proportion who are unattached or single parents continued to rise into the 1990s as well (Table 2.2). As with children, changes in demographics and labour supply have not placed downward pressure on low-income in the 1990s, but rather the opposite, as will be seen later.

Table 2.1  
**Distribution of Individuals New-Born to 14 Years: By Familial Characteristics**

	1973	1981	1986	1988	1994	1995
	(Percent)					
<b>Age of Family Head<sup>1</sup></b>						
Less than 26	9.1	9.3	7.4	6.8	6.0	5.7
27 to 34	28.9	36.1	35.4	34.9	32.3	31.4
35 to 44	42.6	41.1	45.4	47.0	49.0	50.1
45 to 54	16.4	11.3	9.7	9.5	11.0	11.1
55 and Older	3.1	2.2	2.0	1.7	1.8	1.7
<b>Education<sup>2</sup></b>						
Elementary	31.1	18.6	11.5	10.4	6.3	5.7
Secondary	46.4	47.4	47.9	46.8	50.1	50.5
Some Post-Secondary	14.2	20.5	22.4	25.2	25.9	26.2
University Degree	8.3	13.5	18.2	17.6	17.7	17.7
<b>Number of Children</b>						
One	17.2	24.5	24.5	24.5	25.6	26.3
Two	35.0	44.6	45.0	46.9	45.5	44.9
Three	24.9	22.1	22.7	20.7	20.8	20.7
Four or More	22.9	8.8	7.8	8.0	8.1	8.2
<b>Family Status/Number of Earners</b>						
Single Parent / No Earners	1.9	2.5	3.3	3.4	5.4	5.1
Single Parent / One Earner	2.7	4.6	5.2	6.2	7.4	7.6
Two Parent / No Earners	2.4	1.7	2.7	1.9	3.6	3.5
Two Parent / One Earner	45.6	32.4	26.5	22.0	20.6	20.8
Two Parent / Two Earners	47.4	58.7	62.3	66.4	63.0	63.0

<sup>1</sup> Adult with highest earnings.

<sup>2</sup> Education level of highest earner in economic family.

Changes in family and labour market characteristics among the middle-aged has been less dramatic than in the younger age groups. Educational attainment has risen and continues to do so into the 1990s. However, like the younger age groups, the proportion of 45 to 54 year-olds in two earner families peaked in 1988 (Table 2.3).

In contrast to the younger generations, changing demographic and labour market characteristics of the elderly tended to exert, for the most part, a downward influence on the low-income rate over the entire period.

- [1] The educational attainment of seniors rose continuously through the period, and will continue to do so as more highly educated cohorts age.<sup>4</sup> The proportion in families headed by a person with elementary education fell from 58% in 1973 to 37% in 1995 (Table 2.4).
- [2] The proportion of the elderly in families with at least one private pension has risen significantly, from 29% in 1973 to 54% in

1995. This rise has also been continuous, and quite significant in the 1990s.

- [3] With the maturation of the public pension system, the proportion of the elderly in a family receiving C/QPP rose from 29.5% in 1973 to 88.6% in 1995. The proportion in families where two or more are receiving C/QPP has also increased dramatically, from 2% in 1973, to 22% in 1988, and 32% in 1995. This too would tend to put downward pressure on low-income continuously throughout the period.
  - [4] In contrast, the proportion of elderly living in a family with at least one earner has fallen from 42% in 1973 to 27% in 1995 potentially increasing the risk of low-income.
- To isolate the influence of changing family structure on the probability of low-income, we decompose the change in this probability into two parts: that due to the change in the characteristics of families (higher education level, more single parents, fewer children, more earners), and



Table 2.2  
**Distribution of Individuals 25 to 34 Years:  
 By Demographic and Labour Market Characteristics**

	1973	1981	1986	1988	1994	1995
	(Percent)					
Education <sup>1</sup>						
Elementary	20.4	12.0	9.3	9.3	6.8	6.5
Secondary	46.8	46.3	47.7	46.2	46.6	46.4
Some Post-Secondary	20.4	24.8	26.1	28.3	27.8	27.6
University Degree	12.4	16.8	17.0	16.2	18.9	19.4
Number of Children						
None	31.1	40.8	47.3	47.8	51.8	53.1
One	20.4	21.5	19.2	19.2	19.4	18.3
Two	29.5	26.7	23.0	23.8	20.7	20.2
Three or More	19.0	11.0	10.4	9.1	8.1	8.4
Number of Earners <sup>2</sup>						
None	2.5	2.8	4.3	3.4	6.2	5.7
One	47.8	38.7	34.8	32.8	33.3	34.7
Two or More	49.8	58.6	60.9	63.7	60.5	59.6
Family Status						
Unattached	8.5	14.2	16.3	17.1	17.9	19.0
Single Parent	2.4	2.9	3.2	3.3	4.3	4.2
Two Adults Plus	89.1	82.9	80.5	79.6	77.8	76.8

<sup>1</sup> Education level of highest earner in economic family.

<sup>2</sup> Number of earners in economic family.

Table 2.3  
**Distribution of Individuals 45 to 54 Years:  
 By Demographic and Labour Market Characteristics**

	1973	1981	1986	1988	1994	1995
	(Percent)					
Education <sup>1</sup>						
Elementary	38.1	32.3	24.6	22.6	13.1	13.7
Secondary	42.9	42.2	43.2	42.0	47.5	46.2
Some Post-Secondary	12.3	14.6	16.7	18.5	19.6	20.3
University Degree	6.7	10.9	15.5	16.9	19.7	19.8
Number of Children (New-Born to 14 years)						
None	56.0	71.5	76.9	79.0	80.0	79.7
One	23.1	19.4	16.0	13.7	12.9	13.8
Two	12.5	6.4	5.1	5.5	5.4	5.2
Three or More	8.5	2.6	2.0	1.8	1.5	1.3
Number of Earners <sup>2</sup>						
None	4.1	4.2	4.8	5.2	6.3	6.3
One	31.6	24.5	22.7	20.9	23.9	24.3
Two or More	64.3	71.2	72.4	73.9	69.6	69.3
Family Status						
Unattached	6.3	7.9	9.4	10.8	11.9	12.4
Single Parent	0.5	0.6	0.8	0.7	0.9	1.2
Two Adults Plus	93.1	91.5	89.8	88.4	87.0	86.5

<sup>1</sup> Education level of highest earner in economic family.

<sup>2</sup> Number of earners in economic family.

Table 2.4  
**Distribution of Individuals 65 Years and Over:  
 By Demographic and Labour Market Characteristics**

	1973	1981	1986	1988	1994	1995
	(Percent)					
Education <sup>1</sup>						
Elementary	57.5	49.9	44.2	42.9	37.2	37.1
Secondary	31.0	35.0	37.2	37.5	42.5	42.9
Some Post-Secondary	8.7	9.7	12.1	11.9	12.8	11.6
University Degree	2.7	5.4	6.5	7.7	7.6	8.4
Number of Adults in Family <sup>2</sup>						
One	27.2	32.2	30.8	32.2	31.7	30.9
Two	51.3	48.6	50.8	51.3	53.6	55.0
Three or More	21.5	19.2	18.4	16.5	14.7	14.0
Number of Earners						
None	58.0	65.0	69.4	71.1	74.4	73.1
One or More	42.0	35.0	30.6	28.9	25.6	26.9
Number of Persons in Family with C/QPP						
No C/QPP	70.5	36.5	26.7	21.9	11.3	11.3
One with C/QPP	27.1	52.6	57.3	56.5	57.5	56.2
Two or More with C/QPP	2.4	11.0	16.0	21.6	31.2	32.4
Number in Family with Private Pension <sup>3</sup>						
No Private Pension	71.1	63.1	55.3	52.3	46.0	45.3
At Least one Private Pension	28.9	36.9	44.7	47.7	54.0	54.7

<sup>1</sup> Education of highest earner (pension) in family.

<sup>2</sup> Economic family, where unattached individuals are considered a family.

<sup>3</sup> Includes RRSP annuities.

that due to the change in the risk that someone in a family with a given set of characteristics will be in low-income.

For example, the risk of low-income is usually higher among individuals in a family where the primary earner has little education, and hence a lower earnings potential. Thus, a change in the educational composition of families in a particular generation can alter the overall incidence of low-income. However, the risk of low-income given a particular level of education can also change. Thus, relative earnings may fall or unemployment might rise among the less educated in response to declining demand for their skills. We assess the influence of both factors.

As noted earlier both the rate and direction of change has varied considerably over the 1973 to 1995 period. To capture these differences, three periods are used in the analysis: 1973 to 1981 when the rise in female participation rates was especially strong; 1981 to 1988, which represents the change over an entire business cycle (peak to peak); and 1988 to 1995,

representing changes since the last business cycle peak.

Logistic regression is used to decompose the change in the probability of low-income into that due to changes in composition and that due to changes in the risk of low-income associated with a given characteristic. The dependent variable takes on the value 1 if the individual has an income less than half the median income (of all individuals in the population), and 0 otherwise. The independent variables, which define the dimensions across which compositional change can take place, resemble the variables outlined in Tables 2.1 to 2.4. The variables are not used in exactly the manner shown in these tables as some combinations of these variables are undefined, such as two or more adult earners in a single parent family. More methodological detail as well as definitions of the variables and the regression results are presented in the Appendix.

The results, presented in Table 2.5, indicate that family composition changes in the 1990s have raised the risk of low-income. In the 1970s

Table 2.5  
**Decomposition of the Change in the Probability of Having Low-Income**

	New-Born to 14 Years	25 to 34 Years	45 to 54 Years	65 Years and Older
(Percentage Points)				
<b>A. 1973 to 1981</b>				
Change in the Incidence of Low-Income	-2.8	+0.7	-1.2	-5.9
Change Due to Family Characteristics	-5.5	-1.6	-1.8	-2.5
Change Due to Risk of Low-Income Associated with Particular Characteristics	+2.7	+2.2	+0.6	-3.4
<b>B. 1981 to 1988</b>				
Change in the Incidence of Low-Income	+0.2	+1.0	-0.8	-8.7
Change Due to Family Characteristics	-1.7	-0.4	-0.7	-3.7
Change in Risk of Low-Income Associated with Particular Characteristics	+1.9	+1.4	-0.1	-5.0
<b>C. 1988 to 1995</b>				
Change in Incidence of Low-income	+1.0	+0.8	+1.1	-7.1
Change Due to Family Characteristics	+2.0	+1.5	+0.6	-2.7
Change Due to Risk of Low-Income Associated with Particular Characteristics	-1.0	-0.7	+0.5	-4.4

and 1980s compositional effects reduce the probability of low-income for all age groups. Changes in fertility and labour market behaviour of working-age adults in particular reduced the risk of low-income (by the number of percentage points indicated in the table). In contrast, during the 1990s the impact is positive for all groups (except for the elderly) indicating that compositional changes have increased the risk of low-income.

The effects of these changes are particularly striking among children. Between 1973 and 1981 changes in family composition (especially the rise in two-earner families) put significant downward pressure on the likelihood of low-income: reducing the probability of low-income by 5.5 percentage points. Compositional effects in the 1980s were more modest (1.7 percentage points) but still in a favourable direction. In contrast, compositional changes between 1988 and 1995 increased the risk of low-income among children by 2 percentage points. This was mainly the result of a decline in the number of families with multiple wage-earners and an increase in single parent families.

A similar, if less dramatic, reversal is observed among working-age adults. After tending to reduce the incidence of low-income through the 1980s, compositional changes (especially labour market participation) tend to increase the likelihood of low-income in the 1990s. The

impact was substantial for 25 to 34 year-olds (about 1.5 percentage points) but quite modest among the middle-aged.

Some of the changes during the 1990s may prove to be temporary. Declining employment levels among working-age adults, for example, may be due in part to the recession. However, by 1995 the economy was well into recovery and one would have expected employment/population ratios to return to pre-recession levels. However, this did not occur in either 1995 or 1996.<sup>5</sup> More significantly, the large changes that buffered children against the risk of low-income in the 1970s and 1980s cannot be expected to do so in the future. Long term trends such as declining family size and rising rates of labour force participation among women have lower and upper limits. These developments are one-time events that cannot be repeated in the future. Rather, future gains in reducing low-income among children will depend mainly on improved earnings opportunities for their parents (young adults) and/or improved social transfers. Unlike the young, compositional changes among seniors—especially higher levels of education and improved access to public and private pensions—have reduced the risk of low-income in all three periods and by fairly substantial amounts: 2.7 percentage points in the 1970s; 3.7 percentage points in the 1980s; and 2.7 percentage points in the 1990s.



### 3. Conclusion

Relative stability in the incidence of low-income among children and the working-age population during the 1980s masked a number of underlying trends that demonstrated more volatility. As the earnings of the young, the less educated and the lower paid fell through the decade, the labour market became a less important source of income for low-income families. Based on market income alone, the incidence of low-income rose significantly among children and young adults through the 1980s and 1990s. The rising risk of low-income was offset by two factors: rising transfer payments and a change in the characteristics of the families in which Canadians live. Through the 1980s and early 1990s transfer payments were increasing as a source of income among low-income Canadians as market earnings fell, and families altered their characteristics so as to reduce the incidence of low-income.

This changed in the 1990s. Trends in family structure that had reduced the risk of low-income in the past either stabilized or reversed direction while the number of single parent families continued to rise. The employment/population ratio fell among men of all ages, and stopped rising among women. Between 1988 and 1995, these compositional changes increased the risk of low-income by about 2 percentage points among children and young adults.

In order to cut deficits and increase work incentives, governments began altering the transfer system in the 1990s. Because many of these changes are comparatively recent it is difficult to establish with any certainty what their consequences will be in the longer run. One aim of welfare reform is to increase work incentives so that low-income families will improve their incomes with higher earnings. Several studies have focused on this issue for lone parent mothers, and concluded that higher welfare benefits in the late 1980s had a significant effect on participation in welfare and a fall in employment in this group (Charette and Meng 1994, Kapsalis 1996, Dooley 1994b). The assumption is that reducing benefits will reverse the process. Although it is premature to reach strong conclusions on this matter, to date there is little evidence of such a change: the earnings of low-income families, especially those with children, have declined substantially since 1990. The 1996 Survey of

Consumer Finances shows that transfer payments to families in the lowest quintile fell by 3% (Statistics Canada 1997). Higher earnings did not offset this reduction so that the average total income of these families also fell by about 3%.

The central issue, however, is not whether social transfers create work disincentives (they almost certainly do) but whether their magnitude could be such as to explain the declining earnings of young adults (and low-wage workers more generally) that have been documented. There are a number of reasons to believe that it is unlikely that the decline in employment earnings among low-income families was mainly the result of increased work disincentives associated with the transfer system. Hum and Simpson (1991) review the labour supply literature and conclude that labour supply responses to the tax transfer system are small. The decline in earnings of younger adults (who are the parents of most young children) is common to a number of countries with very different transfer systems (Davis 1992). Moffit (1992) concludes for the U.S. that while there is some work disincentive associated with welfare programs, the lack of such disincentives would only marginally increase the employment income of participants and that in general labour supply is relatively inelastic to potential policy changes regarding the welfare system. Researchers believe that changes on the demand side of the labour market, perhaps related to changes in trade or technology, are more likely to explain changes in the patterns of earnings in many developed countries, particularly the declining earnings among the lower paid/less skilled workers (Katz and Murphy 1992). Changes on the supply side, related to changing welfare incentives or other factors, are considered less significant.

In any case, it may be possible in the near future to test the extent to which changes in the social transfer system influence employment earnings, or alternatively influence the level of low-income, as social policy changes at the Federal and Provincial levels work their way through the system. Monitoring and explaining the impact on low-income of changes taking place in the labour market and the social transfer system will be important if we are to understand aggregate trends in the incidence of low-income in coming years.

## Appendix

### Data Sources and Variable Definitions

The Survey of Consumer Finances (SCF) is the source of our data. We define market income to include wages and salaries, military pay, self-employment earnings, investment income, and private pensions. Social transfers include family and youth allowances, OAS, GIS, C/QPP and Unemployment Insurance benefits, Income Assistance, provincial tax credits, child tax credits, federal sales tax credit, GST credit, other government transfers. Transfers are before tax amounts. Income taxes constitute another (negative) component of income. The SCF underestimates transfer income, especially income from UI and Income Assistance. However, the level of underestimation is consistent through time. Between 75% and 80% of government transfers are captured in the SCF file for the years under review. Hence the assessment of the effect of transfers is a conservative one, as we are underestimating its impact on family income, but it is consistent through time. In contrast, taxes payable reported in the SCF constitute 98% of those reported by Revenue Canada

Our calculation of “Adult-Equivalent Adjusted” family income relies upon a particular equivalence scale. There are many equivalence scales available, including those implicit in the construction of Statistics Canada’s Low-Income Cut-offs (LICOs). We use the “central variant” scale proposed by Wolfson and Evans (1992). In this version the first adult is given a weight of 1.0, and each additional adult a weight of 0.4. The first and each subsequent child is assigned a weight of 0.3, except in single parent families where the first child is assigned 0.4.

Our measure of “low-income” is the Low-Income Measure (LIM), defined as 50% of the median income. LIMs, unlike LICOs, are sensitive to changes in the shape of the income distribution (inequality) but not to changes in average income levels (Wolfson and Evans 1992, Sharif and Phipps 1994). Our focus is on the impact of markets, families and public policy on the distribution of income, not its level. However, much of the analysis was replicated using the post-tax/post-transfer LICOs and very similar results were obtained. The two measures show similar trends but quite different levels of low-income. For

example, among persons over 65 all measures indicate a continuous decline in the incidence of low-income. Based on the pre-tax, post-transfer LICO low-income is almost halved between 1981 and 1995, from around 34% to 18.7%. The post-tax, post-transfer LICO indicates a more dramatic decline, from 21.0% in 1981 to 7.7% by 1995. The reduction is even more dramatic when the LIM is used: declining from around 20% in 1981 to 3.6% by 1995. This is similar to the findings of Wolfson and Murphy (1996), who use a similar measure. They note that this very low value for the incidence of low-income is the result of the OAS/GIS income falling just above half the adjusted median income. Thus, even small changes to the level of the OAS/GIS income guarantee can have a large effect on the number of elderly falling below less than one-half the median income.

### Logistic Analysis of Change in the Probability of Low-Income

A description of how the logistic regression model used in Section 2.2 is estimated (using the period 1981 to 1988 to illustrate) follows. The logistic functional form is:  $Y = 1/[1+\exp(-\beta X)]$  where  $Y=1$  if a child's family income is less than one-half the median family income, and  $Y=0$  otherwise. Transforming in the usual manner, the equation estimated is  $L = \beta X + u$ , where  $L = \ln[P/(1-P)]$  is the logit,  $P = \Pr\{Y=1|X\}$ ,  $X$  is a vector of independent variables,  $\beta$  is the vector of associated coefficients.

Using data for 1981, we obtain  $L_{81} = \beta_{81} X_{81} + u$ , and then compute  $\bar{P}_{81}$ , the overall mean probability of a child having less than 0.5 median family income in 1981. To calculate the estimated mean probability of a child having a family income below one half the median, one could simply estimate the probability at the mean values of the variables. However, since a nonlinear function is used, this typically does not match sample mean derived from the raw data. Thus, the mean probability is calculated by estimating the probability of each child in the sample having a family income below one half the median based on the regression equation and then averaging these probabilities across all individuals in the sample (using the sample weights). In this way the probability estimated using the regression equation matches the sample mean from the raw data.

Thus,  $\bar{P}_{81} = \frac{\sum_{i=1}^n w_i \hat{P}_{i,81}}{\sum_{i=1}^n w_i}$ , where  $w_i$  is the sample

weight associated with individual  $i$ ,  $n$  is the number of observations, and where  $\hat{P}_{i,81}$  is the estimated probability for individual  $i$  in year 1981, which is computed as follows:

$$\hat{P}_{i,81} = \frac{1}{1 + \exp(-\beta_{81} X_{i,81})}$$

To decompose the total change in  $P$  between, say 1981 and 1988, into that due to changes in family composition (that is, changes in the independent variables) and changes in the risk of being in low-income given a particular set of characteristics (changes in the coefficients), we:

- [1] Alter the composition of families (the independent variables), keeping the value of the coefficients fixed at the 1981 values. Thus  $L^* = \beta_{81} X_{88}$ . We compute  $L^*$ , and calculate  $\bar{P}^*$  as described above. Then  $\bar{P}^* - \bar{P}_{81}$  = the change in  $\bar{P}$  between 81 and 88 due to the change in the composition of families with children
- [2] The coefficients are then changed from their 1981 to their 1988 values. Thus,  $L_{88} = \beta_{88} X_{88}$ , and  $\bar{P}_{88}$  is computed. Then  $\bar{P}_{88} - \bar{P}^*$  = change in  $P$  due to change in

the risk of being in low-income given a particular set of family characteristics (that is, to change in coefficients).

Whether the coefficients or the values of the variables are altered first does matter; it is done both ways and the average value of the two results used. Also, the usual caveat associated with the interpretation of such results applies here. There are no explicit behavioural links between the two basic factors (demographic change and the income position of children within demographic groups) in the model, although in reality there almost certainly are. To some extent, changes in the economic position of families and changes in family composition are jointly determined. Ideally one would like to estimate the effect of exogenous changes in demography and labour market circumstance on the likelihood of low-income, but there is some endogeneity in the model. If economic conditions of, say, young families with low levels of education deteriorate, this may well influence their probability of having children, and hence the demographic composition of children. Also, declining labour market earnings of young individuals may have prompted many second earners in young families to enter the labour market. Such relationships are not addressed here. Hence, the results provide a decomposition of history in an accounting sense. They estimate the direct, but not indirect, influence of these factors on low-income among children during the period.

The complete regression results from the logistic regressions are offered in Table 2A.2.



Table 2A.1  
**Changing Economic Status of Different Age Groups:  
 Adult Equivalent Adjusted Family Income of Individuals**

	1973	1981	1986	1988	1990	1991	1994	1995
<b>A. New-Born to 14 Years</b>								
Number of Persons ('000)	5,900	5,306	5,270	5,338	5,467	5,552	5,852	5,867
Pre-Tax Pre-Transfer Income								
Median Income (1991 \$000's)	16.2	20.4	20.9	21.4	21.5	20.3	20.3	20.1
Indexed Median Income	100	126	129	132	133	125	125	124
Relative Median Income	0.89	0.91	0.93	0.92	0.91	0.92	0.93	0.92
Percent Below 0.5 Median Income	22.3	19.9	23.0	22.3	24.5	25.9	25.9	26.1
Post-Tax Post-Transfer Income								
Median Income (1991 \$000's)	14.9	18.6	18.7	19.1	19.2	18.5	18.5	18.3
Indexed Median Income	100	125	126	128	129	124	124	123
Relative Median Income	0.88	0.89	0.90	0.89	0.89	0.90	0.89	0.89
Percent Below 0.5 Median Income	17.3	14.5	15.0	14.7	15.6	15.4	15.3	15.7
<b>B. 25 to 34 Years</b>								
Number of Persons ('000)	3,053	4,169	4,478	4,581	4,640	4,624	4,864	4,783
Pre-Tax Pre-Transfer Income								
Median Income (1991 \$000's)	21.7	25.1	24.6	25.6	25.0	23.6	24.5	23.6
Indexed Median Income	100	116	113	118	115	109	113	109
Relative Median Income	1.19	1.12	1.09	1.09	1.06	1.07	1.12	1.08
Percent Below 0.5 Median Income	11.9	14.0	18.0	16.9	18.0	20.1	19.5	18.7
Post-Tax Post-Transfer Income								
Median Income (1991 \$000's)	19.2	22.2	21.7	22.2	22.0	21.1	21.9	21.2
Indexed Median Income	100	116	113	116	115	110	114	110
Relative Median Income	1.13	1.07	1.05	1.04	1.02	1.03	1.05	1.03
Percent Below 0.5 Median Income	8.7	9.3	11.7	10.3	10.8	11.0	10.8	11.1
<b>C. 45 to 54 Years</b>								
Number of Persons ('000)	2,240	2,454	2,536	2,678	2,867	3,027	3,602	3,755
Pre-Tax Pre-Transfer Income								
Median Income (1991 \$000's)	22.4	27.7	28.4	30.1	30.9	29.7	29.9	29.3
Indexed Median Income	100	124	127	134	138	133	133	131
Relative Median Income	1.23	1.24	1.27	1.29	1.31	1.35	1.36	1.34
Percent Below 0.5 Median Income	14.4	13.7	14.6	14.1	13.6	14.0	15.2	16.2
Post-Tax Post-Transfer Income								
Median Income (1991 \$000's)	20.1	24.8	24.6	25.9	26.5	25.6	25.5	25.2
Indexed Median Income	100	123	122	129	132	127	127	125
Relative Median Income	1.19	1.19	1.19	1.21	1.23	1.24	1.23	1.22
Percent Below 0.5 Median Income	10.1	9.0	9.0	8.2	8.1	8.0	8.5	9.3
<b>D. 65 Years and Older</b>								
Number of Persons ('000)	1,683	2,223	2,557	2,710	2,873	2,950	3,297	3,379
Pre-Tax Pre-Transfer Income								
Median Income (1991 \$000's)	5.6	7.3	6.5	6.6	8.4	7.7	6.8	8.1
Indexed Median Income	100	130	116	118	150	138	121	145
Relative Median Income	0.31	0.33	0.29	0.28	0.36	0.35	0.31	0.37
Percent Below 0.5 Median Income	59.8	59.9	63.0	63.4	58.3	59.6	61.8	58.6

Table 2A.1 – Concluded  
**Changing Economic Status of Different Age Groups:  
 Adult Equivalent Adjusted Family Income of Individuals**

	1973	1981	1986	1988	1990	1991	1994	1995
Post-Tax Post-Transfer Income								
Median Income (1991 \$000's)	12.3	15.3	15.9	16.3	17.8	17.0	17.3	18.0
Indexed Median Income	100	124	129	133	145	138	141	146
Relative Median Income	0.72	0.74	0.77	0.76	0.82	0.82	0.83	0.87
Percent Below 0.5 Median Income	25.3	19.4	9.7	10.7	7.3	5.0	4.0	3.6
<b>E. All Ages</b>								
Number of Persons ('000)	20,805	23,814	24,807	25,347	26,099	26,495	28,867	29,197
Pre-Tax Pre-Transfer Income								
Median Income (1991 \$000's)	18.2	22.4	22.4	23.4	23.6	22.1	21.9	21.9
Indexed Median Income	100	124	124	129	130	121	120	120
Relative Median Income	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Below 0.5 Median Income	21.5	21.1	24.4	23.8	24.2	25.6	26.4	26.2
Post-Tax Post-Transfer Income								
Median Income (1991 \$000's)	16.9	20.8	20.7	21.4	21.6	20.6	20.7	20.6
Indexed Median Income	100	123	122	126	127	122	122	122
Relative Median Income	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Below 0.5 Median Income	14.3	12.3	12.1	11.5	11.6	11.5	11.7	11.8

**Note:** The base year for the indexed median income is 1973.

**Table 2A.2**  
**Logistic Regression Results of the Probability of an Individual Having Income Below 50% of the Median Income**

	1973		1981		1988		1994		1995	
	coefficient	t-statistic	coefficient	t-statistic	coefficient	t-statistic	coefficient	t-statistic	coefficient	t-statistic
A. New-Born to 14 Years										
Intercept	-2.168	-24.42	-1.358	-17.28	-0.820	-9.15	-0.880	-9.74	-0.889	-8.90
Age of Family										
Less than 26 <sup>a</sup>										
27 to 34	-0.746	-9.38	-0.757	-10.47	-1.095	-13.37	-0.923	-10.85	-0.663	-7.07
35 to 44	-0.606	-7.97	-0.933	-12.74	-1.552	-18.61	-1.067	-12.67	-0.963	-10.31
45 to 54	-0.259	-3.11	-0.582	-6.49	-1.165	-10.71	-0.951	-8.73	-0.662	-5.67
55 and Older	0.144	1.12	-0.303	-2.09	-1.525	-7.89	-1.304	-6.28	-0.909	-4.18
Education										
Elementary	0.849	19.47	0.982	19.03	0.765	11.07	0.710	8.75	0.541	5.74
Secondary <sup>a</sup>										
College/Some University	-0.639	-8.07	-0.709	-10.41	-0.493	-8.03	-0.397	-6.83	-0.039	-0.67
University Degree	-2.079	-12.27	-0.952	-10.25	-1.074	-11.99	-0.779	-9.50	-0.812	-9.09
Number of Children										
One <sup>a</sup>	0.340	4.40	0.215	3.40	0.287	4.20	0.067	1.06	0.236	3.59
Two	0.900	11.36	0.779	11.43	1.013	13.34	0.628	8.90	0.420	5.48
Three	1.957	25.49	1.404	17.94	1.792	20.34	1.241	14.57	1.071	11.67
Four or More										
Family Type/Number of Earners										
One Adult, No Earners	4.372	24.26	4.167	25.54	4.010	26.28	2.343	29.39	2.314	26.15
One Adult, One Earner	1.517	15.77	1.082	14.41	1.188	15.95	0.681	9.22	0.363	4.65
Two or More Adults, No Earners	3.621	24.08	3.733	21.64	3.499	22.53	3.033	28.69	2.729	24.54
Two or More Adults, One Earner <sup>a</sup>										
Two or More Adults, Two or More Earners	-0.865	-19.31	-1.285	-26.55	-1.257	-23.24	-1.312	-22.61	-1.515	-25.13
Sample Size	24,253		25,438		22,380		21,527		18,360	
Model Chi Square	6253.40		6272.57		6501.76		5861.47		4799.58	
B. 25 to 34 Years										
Intercept	-5.605	-21.19	-4.924	-29.91	-4.539	-31.39	-4.057	-32.56	-3.943	-29.04
Education										
Elementary	2.043	10.18	1.623	13.31	0.870	6.73	0.716	5.25	0.595	4.06
Secondary	1.206	6.11	0.650	5.92	0.429	4.44	0.408	4.32	0.246	2.53
College/Some University	0.954	4.56	0.289	2.38	0.264	2.57	0.247	2.43	-0.060	-0.55
University Degree <sup>a</sup>										



Table 2A.2 – Continued

Logistic Regression Results of the Probability of an Individual Having Income Below 50% of the Median Income

	1973		1981		1988		1994		1995	
	coefficient	t-statistic	coefficient	t-statistic	coefficient	t-statistic	coefficient	t-statistic	coefficient	t-statistic
Family Type/Number of Earners										
Unattached, No Children, No Earners	6.568	15.08	7.088	16.77	5.541	24.89	4.524	27.59	4.720	24.77
Unattached, No Children, One Earner	2.363	10.61	2.272	14.85	2.494	18.77	1.936	16.52	1.791	13.43
One Adult, One Child, No Earners	5.515	10.88	7.901	8.55	6.358	14.85	4.142	19.32	5.317	15.81
One Adult, One Child, One Earner	2.695	7.35	3.393	15.53	3.351	16.67	2.371	11.90	2.514	11.81
One Adult, Two or More Children, No Earners	7.243	12.46	7.057	15.15	6.983	16.76	4.726	22.80	5.069	20.72
One Adult, Two or More Children, One Earner	3.812	13.15	3.886	18.56	4.143	21.63	3.003	15.50	3.045	14.19
Two or More Adults, No Children, No Earners	4.765	11.54	3.831	15.27	4.357	17.56	3.089	14.84	3.056	13.91
Two or More Adults, No Children, One Earner	1.769	6.54	2.218	11.99	1.728	8.74	1.497	9.22	1.901	11.34
Two or More Adults, No Children, Two or More Earners <sup>a</sup>										
Two or More Adults, One or More Children, No Earners	5.906	16.17	6.291	18.81	5.930	20.62	4.884	27.10	5.128	22.44
Two or More Adults, One or More Children, One Earner	2.149	10.93	2.476	17.24	2.549	18.93	2.122	17.51	2.393	17.82
Two or More Adults, One or More Children, Two or More Earners	0.946	4.48	0.910	5.98	1.061	7.82	0.253	1.93	0.528	3.69
Sample Size	11,320		17,225		16,747		15,354		12,481	
Model Chi Square	1592.35		2910.31		2984.63		2826.06		2304.55	
<b>C. 45 to 54 Years</b>										
Intercept	-5.928	-16.57	-4.708	-23.46	-5.197	-26.75	-4.418	-32.15	-4.007	-31.83
Education										
Elementary	2.486	7.47	1.463	7.76	1.722	9.54	1.028	7.16	0.576	4.23
Secondary	1.589	4.74	0.686	3.58	0.945	5.29	0.816	6.44	0.465	4.02
College/Some University	0.634	1.66	0.200	0.88	0.767	3.80	0.477	3.22	0.225	1.65
University Degree <sup>a</sup>										
Family Type/Number of Earners										
Unattached, No Children, No Earners	6.631	16.55	4.757	23.33	5.791	26.91	4.442	29.67	4.626	30.16
Unattached, No Children, One Earner	2.287	11.05	2.028	13.20	2.466	16.38	1.857	15.30	1.787	14.47
One Adult, One or More Children	4.135	11.59	3.468	12.46	3.546	12.60	3.009	13.81	2.601	11.81
Two or More Adults, No Earners	4.811	22.51	4.352	25.58	4.089	24.27	3.713	29.38	3.713	27.16
Two or More Adults, No Children, One Earner	1.562	8.67	1.796	13.94	1.854	11.69	1.455	11.62	1.487	11.88

Table 2A.2 – Concluded  
**Logistic Regression Results of the Probability of an Individual  
 Having Income Below 50% of the Median Income**

	1973		1981		1988		1994		1995	
	coefficient	t-statistic	coefficient	t-statistic	coefficient	t-statistic	coefficient	t-statistic	coefficient	t-statistic
Two or More Adults, No Children, Two or More Earners <sup>a</sup>	2.505	15.09	2.476	17.26	2.841	15.92	1.928	11.00	2.340	14.88
Two More Adults, One or More Children, One Earner	1.479	9.05	1.006	7.61	1.229	7.66	0.733	5.21	0.677	4.81
Two or More Adults, One or More Children, Two or More Earners	8.390		10.464		9.670		12.167		11.085	
Sample Size	1554.75		1724.45		1902.85		1911.99		1818.92	
Model Chi Square										
<b>D. 65 Years or Older</b>										
Intercept	-6.056	-15.98	-6.312	-22.08	-7.365	-20.68	-6.323	-17.44	-6.815	-15.58
Education	1.216	3.83	0.733	3.60	0.840	3.90	0.493	1.88	-0.167	-0.69
Elementary	0.765	2.38	0.267	1.29	0.595	2.72	-0.122	-0.46	-0.782	-3.11
Secondary	0.256	0.74	-0.050	-0.22	0.503	2.10	-0.132	-0.42	-1.066	-3.21
College/Some University										
University Degree <sup>a</sup>										
Number of Earners	2.258	11.78	2.614	12.04	3.062	10.09	1.864	6.46	1.781	4.83
None	0.910	4.78	1.520	7.00	1.734	5.79	0.630	2.12	1.022	2.76
One										
Two or More <sup>a</sup>										
Number of Adults	1.403	10.69	0.923	7.98	-0.025	-0.15	-0.634	-2.94	0.384	1.57
One	-0.027	-0.21	-0.663	-5.64	-0.913	-5.59	-1.305	-6.02	-0.463	-1.91
Two										
Three or More <sup>a</sup>										
Pension Coverage	0.180	0.95	1.395	8.46	2.132	9.87	2.825	8.10	1.982	4.11
No C/QPP, with Private Pension Plan	1.689	10.11	1.829	14.97	2.101	13.91	2.125	9.52	2.537	9.57
With C/QPP, No Private Pension Plan	2.218	14.55	2.925	24.52	3.703	24.61	4.147	18.52	4.348	16.14
No C/QPP, No Private Pension Plan										
With C/QPP, With Private Pension Plan <sup>a</sup>										
Sample Size	7,225		10,260		10,573		11,272		10,426	
Model Chi Square	2260.98		3097.42		2071.74		1001.56		842.14	

<sup>a</sup> Reference case.

## Notes

We would like to thank Dean Lillard, and an anonymous referee for helpful comments, while at the same time noting that this paper reflects solely the views of the authors, and not necessarily those of Statistics Canada.

<sup>1</sup> Pampel (1979) illustrates this nicely with U.S. data. The relative incomes of seniors declined continuously from the late 1940s through the 1960s. Major reforms to Social Security took place in the late 1960s and early 1970s so that by the end of the 1970s the relative economic status of the elderly had returned to post-war levels. Comparable continuous series of income data for Canada only begin in the late 1960s. The similarity in employment trends among the population 65 years and over, however, combined with heightened concern with old age poverty in the 1960s would suggest a comparable pattern in Canada. For data on the incomes of the elderly in 1951 and 1961 see Podoluk (1968).

<sup>2</sup> This analysis was repeated using the post-tax and transfer LICO as the measure of low-income, and the results are very similar. The tax/transfer system increasingly reduced the level of low-income over the 1980s and early 1990s. For example, among children, based on market income, the incidence of low-income rises quite dramatically (from 16.8% in 1981 to 24.1% in 1994). After taxes and transfers are added, the actual rate of (post-tax/transfer) low-income increase much less (from 12.7% to 15.6%). Adding the taxes and transfers reduces the rate by about four percentage points in 1981, but by fully seven points in 1990 and 8.5 points by 1994, indicating the increased role played by the transfer system up to that time. Similar results are evident for 25 to 34 and 45 to 54 year-olds, where the actual incidence of low-income based on disposable income rises in the 1990s, but much less than it does under market income alone.

<sup>3</sup> This statistic is usually calculated using census families, which include only immediate family (the children and the parent). We use the economic family which includes immediate families and other related individuals. Thus, the child of a single mother who is living with her parents would not be counted as living in a "single parent" family under the definition used here but would be if the "census family" definition were used. Our assumption is that such a child shares in some of the economic

resources of the larger family unit. This means, however, the share of children in single parent families will be lower than reported elsewhere.

<sup>4</sup> Since most seniors are not employed, one might argue that the higher level of education is not relevant regarding its influence on income in old age. First, higher levels of education improve the employment and earnings capacity of those elderly who remain in the labour market. Second, those with higher levels of education are more likely to have accumulated savings and pension entitlements during their working lives.

<sup>5</sup> The proportion of men employed (the employment/population ratio) has been falling slowly for some time, from 73.1% at the 1981 business cycle peak to 71.4% at the 1989 peak. It then fell dramatically to 65% in 1992 and has remained at that level through 1996. Especially noteworthy is the decline for men aged 25 to 44 from 88% in 1989 to 83% in 1996. The employment/population ratio of women rose continuously throughout the period to a peak of 54% in 1990 and has fallen since then to about 52%. In contrast to men in the same age group, however, the participation rate for 25 to 44 year-old women did return to its pre-recession level of about 71% by 1996.

## Bibliography

- BATTLE, K. and L. MUSZYNSKI (1995). *One Way to Fight Child Poverty*. Ottawa: Caledon Institute of Social Policy.
- BLANK, R. and D. CARD (1993). "Poverty, Income Distribution and Growth: Are They Still Connected?" *Brookings Papers on Economic Activity*. Vol. 2, 285-339.
- BLANK, R. and M. HANRATTY (1993). "Responding to Need: A Comparison of Social Safety Nets in Canada and the United States." In David Card and Richard B. Freeman (editors). *Small Differences that Matter: Labor Markets and Income Maintenance in Canada and the United States*. Chicago: University of Chicago Press.
- CALEDON INSTITUTE OF SOCIAL POLICY (1997). *Persistent Poverty*. Ottawa: Caledon Institute of Social Policy.
- CHARETTE, M.F. and R. MENG (1994). "The Determinants of Welfare Participation of Female Heads of Households in Canada." *Canadian Journal of Economics*. Vol. 27, No. 2, 290-306.



- DAVIS, S. (1992). "Cross-Country Patterns of Change in Relative Wages." NBER Working Paper No. 4085.
- DOOLEY, M. (1994a). "Women, Children and Poverty in Canada." *Canadian Public Policy*. Vol. 20, 430-43.
- DOOLEY, M. (1994b). "The Use of Social Assistance Income by Canadian Lone Mothers." Department of Economics, McMaster University. Unpublished.
- DOOLEY, M. (1991). "The Demography of Child Poverty in Canada: 1973-1986." *Canadian Studies in Population*. Vol.18, 53-74.
- GOTTSCHALK, P. and S. DANZIGER (1993). "Family Structure, Family Size and Family Income: Accounting for Changes in the Economic Well Being of Children, 1968-1986." In Sheldon Danziger and Peter Gottschalk (editors). *Uneven Tides, Rising Inequality in America*. New-York: Russell Sage, 167-93.
- HUM, D. and W. SIMPSON (1991). *Income Maintenance, Work Effect and the Canadian Mincome Experiment*. Ottawa: Economic Council of Canada.
- KATZ, L. F. and K.M. MURPHY (1992). "Changes in Relative Wages, Supply and Demand Factors." *Quarterly Journal of Economics*. Vol. 107, 235-78.
- KAPSALIS, C. (1996). "Social Assistance Benefit Rates and the Employment Rates of Lone Mothers." Ottawa: Human Resources Development Canada. Working Paper No. W-96-5E.
- KUHN, P. and A.L. ROBB (1996). "Shifting Skill Demand and the Canada-U.S. Unemployment Gap." McMaster University, Department of Economics. Unpublished.
- McFATE, K., T. SMEEDING and L. RAINWATER (1995). "Markets and States: Poverty Trends and Transfer System Effectiveness in the 1980s." In K. McFate, R. Lawson and W. J. Wilson (editors). *Poverty, Inequality and the Future of Social Policy*. New York: Russell Sage.
- MORISSETTE, R., J. MYLES and G. PICOT (1995). "Earnings Polarization in Canada, 1986-1991." In K.G. Banting and C. Beach (editors). *Labour Market Polarization and Social Policy Reform*. Kingston: Queen's University, School of Policy Studies.
- MOFFIT, R. (1992). "Incentive Effects of the U.S. Welfare System: A Review." *Journal of Economics Literature*. Vol. 30, No. 1, 1-61.
- MYLES, J. (1989). *Old Age in the Welfare State: The Political Economy of Public Pensions*. Lawrence, Kansas: University Press of Kansas.
- NATIONAL COUNCIL OF WELFARE (1997). *Another Look at Welfare Reform*. Ottawa: National Council of Welfare.
- PAMPEL, F. (1979). "Changes in the Labor Force Participation and Income of the Aged in the United States 1947-1976." *Social Problems*. Vol. 27, 125-142.
- PICOT, G. (1998). "What is Happening to Earnings Inequality and Youth Wages in the 1990s?" Ottawa: Statistics Canada, Analytical Studies Branch Research Paper No. 116.
- PICOT, G. and J. MYLES (1996). "Social Transfers, Changing Family Structure and Low-Income Among Children." *Canadian Public Policy*. Vol. 22, 244-67.
- PODOLUK J. (1968). *Incomes of Canadians*. Ottawa: Dominion Bureau of Statistics.
- SHARIF, N. and S. PHIPPS (1994). "The Challenge of Child Poverty." *Canadian Business Economics*. Vol. 2, 17-30.
- STATISTICS CANADA (1997). *Income Distributions by Size in Canada, 1996*. Ottawa: Statistics Canada Catalogue No. 13-207.
- WOLFSON, M. and J. EVANS (1992). *Statistics Canada's Low-Income Cut-offs: Methodological Concerns and Possibilities*. Ottawa: Statistics Canada. Discussion Paper.
- WOLFSON, M. and B. MURPHY (1996). "Aging and Canada's Public Sector: Retrospect and Prospect." Ottawa: Statistics Canada, Analytical Studies Branch. Unpublished.
- WOLFSON, M. and B. MURPHY (1995). "Kinder and Gentler: A Comparative Analysis of Incomes of the Elderly in Canada and the United States." In Theodore R. Marmor, Timothy M. Smeeding and Vernon L. Greene (editors). *Economic Security and Intergenerational Justice: A Look at North America*. Washington D.C.: The Urban Institute.

## Chapter 3

# The Declining Labour Market Status of Young Men

RENÉ MORISSETTE

---

From the early 1960s to about the mid-1970s young Canadians lived in an economy which produced high growth rates of output and real income and relatively low unemployment rates. They could benefit from the expansion of employment in the goods sector and public services, industries typically offering good entry-level opportunities. They were entering the labour market in a period when the country's social safety net was becoming more generous. Most of them probably expected that their lifetime earnings would exceed that of their parents.

Today, young Canadians face a different world. The growth of real GDP per capita has slowed; median incomes of families and earnings of full-year full-time employees have stagnated; the unemployment rate has been persistently high; budgetary constraints have halted employment growth in the public sector; and Unemployment Insurance and Income Assistance programs have become more restrictive. Anecdotal evidence suggests that today's young generation does not appear to anticipate having a brighter future than that of their parents. Rather, they seem to be concerned that structural changes in the labour market may have decreased their chances of reaching a "decent" standard of living.

The goal of this chapter is to document how the young fare in today's labour market. The focus is on young men for two reasons. First, most of the recent literature on the growth of earnings inequality has concentrated on the study of male earnings. This approach is chosen because one of the questions addressed is about the consequences of the growth of earnings inequality on youth age-earnings profiles. Second, and more importantly, the labour market behaviour of women is much more complicated to examine because their participation rates have changed dramatically over the last twenty years.

Using a wide variety of both cross-sectional and longitudinal data four major results are uncovered. First, as compared to their counterparts at the beginning of the eighties, today's young men are faring worse across a wide range of labour market indicators. The 1990s generation is attending school in much greater proportions, but those who are not attending school full-time are less likely to be employed. At the same time those employed are less likely to have a full-time job, while those who have a full-time job receive lower wages and are much more concentrated in consumer services, less likely to be unionized, and somewhat less likely to be covered by a pension plan. Second, most of the decline in young men's real wages remains even after accounting for their substantial drop in unionization rate and changes in their industrial distribution of employment. Third, the drop in their real wages measured on a cross-sectional basis appears to have had long-term effects: compared to that of previous cohorts, the age-earnings profile of recent cohorts of young men has deteriorated. Fourth, young men's chances of moving upwards appears to be slightly lower in the 1980s than in the mid-1970s, even after considering both cyclical effects and any drop in real earnings.

## 1. Trends in Employment

As is well known, the relative importance of youth in the population has fallen substantially over the last twenty years. In 1976, young men (those aged 17 to 24) accounted for 25% of the male population aged 17 to 64; twenty years later that proportion had dropped to 17% (Table 3.1). Either in response to adverse economic conditions or to increasing returns to education, a larger proportion of young individuals has been staying in school full-time since the beginning of the 1980s. This proportion has risen from 28% in 1981, to 37% in 1989 and stands at 45% in 1996.

Table 3.1  
Employment Trends of Men Aged 17 to 24 (1976 to 1996)

	1976	1981	1986	1989	1993	1996
<b>A. Labour Market Shares of Young Men</b>						
[1] Share of Men Aged 17 to 24 as Percentage of Men Aged 17 to 64	25.4	24.8	21.5	18.9	17.4	16.7
[2] Percentage of Men Aged 17 to 24 who are Full-Time Students	27.8	27.7	33.6	36.7	44.7	44.6
[3] Percentage of Men Aged 17 to 24 who are Neither Employed nor in School	11.4	12.1	12.4	9.3	12.4	11.2
[4] Percentage of Men Aged 17 to 24 who are Neither Active nor in School	4.5	3.8	3.6	3.5	4.2	4.6
[5] Percentage of Men Aged 17 to 24 who are not Active but are in School	20.3	17.6	21.2	20.9	26.2	27.2
<b>B. All Men Aged 17 to 24</b>						
[1] Participation Rate	75.2	78.6	75.3	75.6	69.6	68.2
[2] Employment/Population Ratio	67.5	68.6	64.6	68.1	57.7	58.2
[3] Unemployment Rate	10.2	12.6	14.2	9.9	17.1	14.8
[4] Rate of Involuntary Part-Time Employment*	1.0	2.1	3.4	2.6	6.3	5.3
[5] = [3] + [4]	11.2	14.7	17.6	12.5	23.4	20.1
<b>C. Men Aged 17 to 24 not Full-Time Students</b>						
[1] Participation Rate	93.3	94.6	94.0	94.0	91.5	90.6
[2] Employment/Population Ratio	83.5	82.7	80.5	84.6	75.6	77.5
[3] Unemployment Rate	10.5	12.5	14.3	10.0	17.4	14.5
[4] Rate of Involuntary Part-Time Employment*	1.1	2.3	4.0	3.1	7.9	6.7
[5] = [3] + [4]	11.6	14.8	18.3	13.1	25.3	21.2

\* Number of men aged 17 to 24 involuntary employed part-time divided by the number of men aged 17 to 24 in the labour force.  
Source: Statistics Canada, Labour Force Survey (September files).

The labour market experience of those who are **not** full-time students and thus, who presumably have made a transition from school to work, has deteriorated. Between the mid-1970s and the late 1980s, the participation rate, employment/population ratio and unemployment rate of this group have displayed some cyclical variation but no upward trend. Roughly 94% of young men who were not in school full-time were active in the labour market in both 1976 and 1989. Further, 85% were employed and 10% of those who were active did not have a job (Table 3.1, Panel C). However, all three statistics show that between 1989 and 1996, labour market conditions have deteriorated. Fewer of them participate in the labour market, fewer of them are employed, and a greater fraction of those who are active are unemployed.

Panel B of Table 3.1 tells the same story for all men aged 17 to 24. The participation rate of this group fell from 76% in 1989 to 68% in 1996. In an accounting sense, most of this decline is associated with an increase in school attendance: the fraction of young men who are not participating in the labour market but who are attending school either part-time or full-time rose 6 percentage points during the same period, from 21% in 1989 to 27% in 1996. As a result, the percentage of young men who are neither active nor in school has shown little variation between these two years.

Table 3.2 considers individuals who are not full-time students and compares their employment, unemployment and underemployment rates by age group. Two points are worth noting.



Table 3.2  
**Employment Patterns of Men who are not Full-Time Students: by Age, 1976 to 1996**

	1976	1981	1986	1989	1993	1996
<b>A. Employment/Population Ratio</b>						
[1] 17-24 Years	83.5	82.7	80.5	84.6	75.6	77.5
[2] 25 to 34 Years	93.5	92.1	88.9	90.8	84.8	86.7
[3] 35 to 64 Years	93.5	92.1	88.9	90.8	84.8	86.7
[4] = [1] / [3]	0.89	0.90	0.91	0.93	0.89	0.89
<b>B. Unemployment Rate</b>						
[1] 17 to 24 Years	10.5	12.5	14.3	10.0	17.4	14.5
[2] 25 to 34 Years	4.0	5.1	8.3	5.9	10.9	8.5
[3] 35 to 64 Years	2.9	3.8	5.5	4.3	8.3	6.8
[4] = [1] / [3]	3.6	3.3	2.6	2.3	2.1	2.1
<b>C. Unemployment Rate + Rate of Involuntary Part-Time Employment</b>						
[1] 17 to 24 Years	11.6	14.8	18.3	13.1	25.2	21.2
[2] 25 to 34 Years	4.3	5.9	10.1	6.9	13.9	10.7
[3] 35 to 64 Years	3.1	4.3	6.6	5.0	10.3	8.5
[4] = [1] / [3]	3.7	3.4	2.8	2.6	2.4	2.5
<b>D. Duration of Unemployment*</b>						
[1] 17 to 24 Years	12.3	14.3	15.8	11.5	23.3	17.9
[2] 25 to 34 Years	13.3	16.6	23.4	19.8	29.0	26.7
[3] 35 to 64 Years	18.9	20.8	33.2	27.5	35.1	32.8
[4] = [1] / [3]	0.65	0.69	0.48	0.42	0.66	0.55

\* Average number of weeks a person has been looking for work, as of the time of the interview.

Source: Statistics Canada, Labour Force Survey (September files).

First, although unemployment rates and rates of underemployment (unemployment plus involuntary part-time employment) of young males are now higher than they were in 1976, they are in fact lower **relative** to those of males aged 35 to 64. The same argument applies to the employment rates: employment/population ratios of young males are now lower than they were in 1976 but show no deterioration relative to those of older workers. Second, between 1981 and 1989, the duration of (truncated) spells of unemployment has trended upwards for workers aged 25 or more but not for young men. As a result, even though the duration of unemployment has risen for youth over the last seven years, it is lower in 1996 than it was in 1976 relative to that of older workers.

The type of jobs young men hold has changed in at least three ways over the last fifteen years. First, the distribution of full-time youth employment has shifted markedly away from manufacturing and public services to low-paid jobs in consumer services. Of all young males employed full-time in 1981, 30% worked in manufacturing industries, 23% in consumer services and 8% in public services (Table 3.3). The corresponding numbers were 23%, 33% and 4% in 1995. While these shifts are also observed among the population of male workers aged 25 to 64, they are much less pronounced. Second, while the unionization rate of all full-time male workers has decreased slightly between 1981 and 1995, the rate of young men working full-time has dropped by 50% during that period: from

Table 3.3  
Distribution of Employment by Industry: Men Employed Full-Time, 1981-1995

	17 to 24 Years			25 to 64 Years			17 to 64 Years		
	1981	1989	1995	1981	1989	1995	1981	1989	1995
Agriculture	2.6	2.4	2.8	0.7	0.9	0.9	1.1	1.1	1.1
Forestry and Mining	4.5	2.6	3.5	4.4	4.0	3.6	4.4	3.8	3.5
Construction	10.8	13.1	12.3	7.4	8.6	7.1	8.0	9.2	7.7
Manufacturing	30.2	26.2	22.9	28.0	27.7	27.2	28.4	27.5	26.8
Distributive Services	15.2	11.7	14.1	19.5	18.5	18.3	18.7	17.5	17.9
Business Services	5.7	6.7	7.0	7.6	8.0	9.7	7.2	7.8	9.4
Consumer Services	23.3	29.7	33.3	11.7	12.1	13.8	13.8	14.5	15.9
Public Services	7.7	7.5	4.2	20.9	20.4	19.4	18.4	18.6	17.8

Source: Statistics Canada, Survey of Work History for 1981, Labour Market Activity Survey for 1989, Survey of Work Arrangements for 1995.

33% in 1981 to 15% in 1995 (Table 3.4). Third, the fraction of full-time jobs covered by a pension plan has fallen for young men from 29% to 25% between 1984 and 1995 but has remained virtually unchanged at 64% among older male workers. Hence, full-time jobs held by young men are now found less often in high-paying sectors of the economy, are much less unionized and provide lower pension plan coverage.

The result is that a large fraction of youth is now part of what could be called a contingent workforce. In 1995, 17% of all young men active in the labour market were unemployed, 8% were involuntarily employed part-time, and 10% were employed in non-permanent positions (Table 3.5). Hence, 35% of them either did not have a job, were underemployed or employed in temporary jobs. The corresponding number for men aged 25 to 64 years is 15%.

2. Annual Earnings and Hourly Wages

Between 1969 and 1977, real annual earnings of men aged 18 to 24 employed full-year full-time rose 30% (Figure 3.1). Earnings began dropping after 1977, fell abruptly between 1981 and 1983 and have not recovered. As a result, young men working full-time year round in 1994 earned (in real terms) what their counterparts received in 1969.

This decrease in real annual earnings occurred in conjunction with a drop in real hourly wages. Real hourly wages of men aged 17 to 24

working full-time fell roughly 20% between 1981 and 1986 (Figure 3.2). They rose 5 percentage points between 1986 and 1990 and then fell again between 1990 and 1993. Meanwhile, men aged 45 or more enjoyed substantial gains: between 1981 and 1993 their real wages rose by at least 15%.

The drop in earnings of youth relative to prime-age workers is not unique to Canada. While there are cross-country differences in both the timing and magnitude of the drop, youth relative earnings fell in numerous countries between the mid-1970s and the mid-1990s: the United States, the United Kingdom, Australia, France, Germany and Japan (OECD 1996).

Various explanations have been put forward to explain the widening of wage differentials across age groups. The idea that changes in the relative labour supply of youth caused that widening can be easily dismissed because in most of these countries the share of young individuals in the labour force has been falling. Hence, other things equal, one would expect that changes in the relative labour supply of youth would decrease wage differentials across age groups.

The changes in the composition of employment by industry could explain part of the decrease in youth real relative wages in Canada. Between 1981 and the mid-1990s, full-time employment has shifted towards consumer services (which generally offer low-paid jobs) among youth to a greater extent than it did among older workers. Furthermore, youth unionization rate has fallen substantially.

**Table 3.4**  
**Unionization Rate of Men Employed in Full-Time Jobs, 1981-1995**

	17 to 24 Years	25 to 64 Years	17 to 64 Years
1981	32.8	46.1	43.6
1986	22.2	45.3	41.9
1989	24.0	44.5	41.7
1995	15.1	40.4	37.8

**Note:** For the years 1981, 1986 and 1989, the numbers are based on the following question:  
"Are you a member of a union or other group which bargains collectively with this employer?"  
For 1995 the numbers are based on the following question:  
"Are you a union member in your (main) job?"

**Source:** Statistics Canada, Survey of Work History for 1981, Labour Market Activity Survey for 1986 and 1989, Survey of Work Arrangements for 1995.

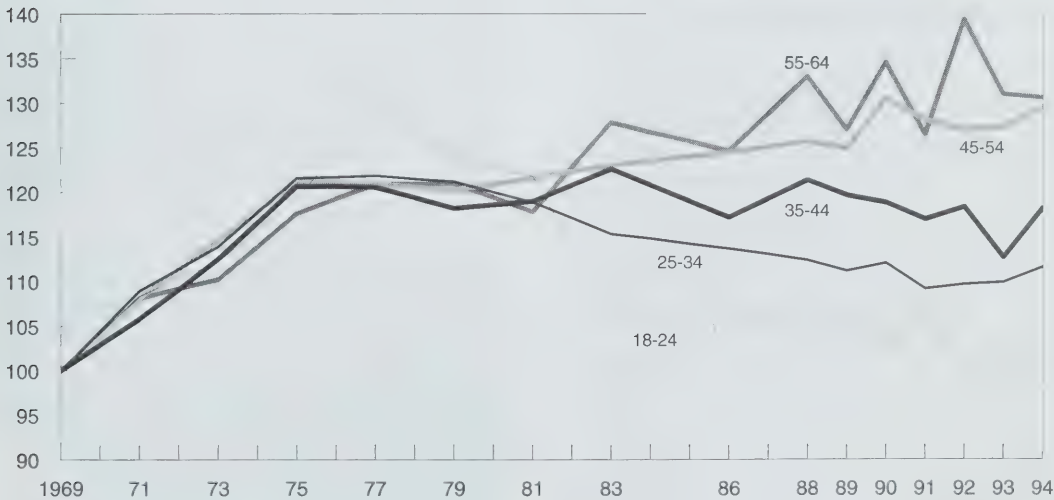
**Table 3.5**  
**Contingent Workforce: Men Aged 17 to 64,  
not Full-Time Students and in the Labour Force, 1995**

	17 to 24 Years	25 to 64 Years	17 to 64 Years
Unemployed	16.9	7.7	8.7
Employed Involuntary Part-Time	8.3	2.2	2.8
Non-Permanent Employment	9.9	5.1	5.6
Contingent Workforce	35.1	15.0	17.1
Other	64.8	85.0	82.9

**Note:** Contingent Workforce refers to the sum of Unemployed, Employed Involuntary Part-Time and Non-Permanent Employment.

**Source:** Statistics Canada, Survey of Work Arrangements for 1995.

**Figure 3.1**  
**Indexed Real Annual Wages and Salaries of Men Employed Full-Year  
Full-Time, by Age, 1969-1994 (1969 = 100)**





**Figure 3.2**  
**Indexed Real Hourly Wages of Male Paid Workers\* Employed Full-Time, by Age, 1981-1993 (1981 : 100)**



\* Male paid workers aged 17-64 employed full-time in their main job in December.

*Source:* Survey of Work History of 1981, Survey of Union Membership of 1984, Labour Market Activity Surveys of 1986-1990, and Survey of Labour and Income Dynamics of 1993.

To assess the contribution of these two factors the data for 1981 and 1993 are combined, and the natural logarithm of hourly wages is regressed on a set of controls for industry, union status, occupations and regions for each of five age groups (17 to 24, 25 to 34, 35 to 44, 45 to 54, and 55 to 64). The regressors also include a dummy variable that equals 1 in 1993 and 0 in 1981 (referred to as year93). This variable measures how much real hourly wages fell between 1981 and 1993. Ideally, one would like to include controls for education. However, changes in the educational categories introduced in 1990 do not allow a comparison of schooling levels between 1981 and 1993. Interaction terms between the year dummy and the other regressors are excluded: this restricts the temporal changes in real hourly wages to be the same in all industries, occupations, regions and types of jobs (unionized versus non-unionized). The year dummy can be thought as capturing “average” changes in real wages that occurred between 1981 and 1993 within jobs. The results obtained from this specification (Model 2) are compared to those of a simple model where the natural logarithm of hourly wages is regressed only on an intercept and year93 (Model 1). This allows us to assess the extent to which sectoral changes in the composition of employment by industry and union status can explain the changes in real hourly wages across age groups.

The results are presented in Table 3.6. The message is unambiguous. For all five age groups, most of the change in real hourly wages observed between 1981 and 1993 remains after controlling for interindustry employment shifts and changes in unionization rate. For instance, Model 1 suggests that real hourly wages of young men employed full-time fell 19% ( $\exp[-0.216] - 1$ ) between 1981 and 1993. Model 2 shows that even after controlling for changes in employment across broad industrial groups and union status, real wages for this group dropped 14% ( $\exp[-0.151] - 1$ ). Thus sectoral changes in the composition of employment by industry and the drop in unionization rate do not appear to be the main factors behind the drop in youth real wages. This is consistent with the fact that the decline in youth relative wages is observed in all broad industrial and occupational groups (Betcherman and Morissette 1994).

Another argument is that the growth of international trade has increased the worldwide supply of low-skilled workers and thus has put downward pressures on wages of these workers while at the same time pulling up wages of high-skilled workers (Wood 1994). Alternatively technological changes—such as the introduction of the personal computer—may have increased the relative demand for high-skilled workers and thus increased the wage gap between workers with

Table 3.6  
**Changes in Real Hourly Wages by Age:  
Male Paid Workers Employed Full-Time 1981 and 1993**

	Model 1	Model 2	Sample Size
17 to 24 Years	-0.216 (15.26)	-0.151 (11.53)	4,054
25 to 34 Years	-0.063 (6.36)	-0.038 (4.16)	7,397
35 to 44 Years	0.081 (6.94)	0.085 (7.89)	5,787
45 to 54 Years	0.214 (15.31)	0.171 (13.32)	4,174
55 to 64 Years	0.139 (7.27)	0.142 (8.13)	2,422

**Note:** The numbers presented in this table are the coefficients of a dummy variable (year93) which equals 1 in 1993, 0 in 1981. For both models, the data for the years 1981 and 1993 have been pooled. The dependent variable is the natural logarithm of hourly wages (in 1993 constant dollars). Model 1 includes only an intercept and the dummy variable year93. Model 2 includes the following additional regressors : 1) industry (7 dummy variables), 2) occupation (7 dummy variables), 3) regions, (4 dummy variables) and, 4) union status. The percentage change in real hourly wages equals the antilog of these coefficients, minus 1. For instance, Model 2 suggests that between 1981 and 1993, real hourly wages of men aged 17-24 fell by 13.9%, i.e.  $\exp(-0.151) - 1$ . Absolute values of t-statistics are in parentheses. Regressions are run using ordinary least squares. The categories “consumer services”, “clerical occupations”, “Ontario” and “non unionized” are the reference groups.

**Source:** Survey of Work History for 1981 and Survey of Labour and Income Dynamics for 1993.

high and those with low human capital, which is generally proxied by labour market experience and education (Katz and Murphy 1992).

### 3. Changes in Age-Earnings Profiles

While the drop in youth real earnings is, on a cross-sectional basis well documented (Beach and Slotsve 1994; Morissette, Myles and Picot 1994), whether the age-earnings profile of young workers has shifted downward over time remains unknown. Real earnings of young workers could be lower at the beginning of their career but could increase faster afterwards and thus exceed those of their counterparts after a certain number of years. In other words, the new age-earnings profile could cross the former age-earnings profile. To determine whether this is the case or not, longitudinal data are required.

Longitudinal data from the T4 supplementary (T4S) tax file, over the period 1975 to 1993 are used. The data are based on a 1% sample of all Canadians who received a T4S form **and** filed a T1 tax return in **at least one year** between 1975 and 1993 (see the Appendix for more details).

The annual earnings in this file are based on T4S forms issued by employers, while the age and gender of workers are determined from T1 records.

Both the T4S and the T1 file are required to create the tax-based data set. This is so because annual earnings derived from the former are consistent over time, but not necessarily so for low earnings if derived from the latter. (Tax credits introduced in the mid-eighties provided an incentive for low earners to file a T1 form that they would otherwise not have had to complete). The T1 file is required to obtain information on the age and gender of individuals. The three main advantages of this longitudinal file are: [1] the accuracy of annual earnings; [2] the large size of the sample; and [3] the length of the time interval covered. The main weakness of the file is the absence of detailed information on individual socio-economic characteristics: the file contains no data on education levels, school attendance, occupation and marital status, among other variables.

The extent to which the drop in youth real earnings measured on a cross-sectional basis has had long-term effects is assessed by

Table 3.7  
Real Annual Earnings Cumulated Over Ten Years by Male Paid Workers:  
1975 to 1984 and 1984 to 1993

Age at the Beginning of the Period	[1] 1975 to 1984	[2] 1984 to 1993	[3] Difference [1]-[2]	[4] Percentage Change
(1989 Dollars)				
18-24	258,130	230,619	27,511	-10.7
25-29	346,117	322,772	23,345	-6.7
30-34	392,203	375,916	16,287	-4.2
35-44	402,704	418,860	-16,156	4.0

**Note:** The calculations are for men with positive earnings during all ten years of the period considered.  
**Source:** T4 Supplementary file.

considering two periods: 1975 to 1984, and 1984 to 1993. Each period covers ten years, includes a recession and ends with the beginning of a phase of recovery. For each, a sample of workers who had positive earnings during all ten years was selected. For instance, to compare the outcomes of young males over the last two decades, I select: [1] men who were aged 18 to 24 in 1975 and who had positive earnings during all ten years from 1975 to 1984; and [2] men who were aged 18 to 24 in 1984 and who had positive earnings during all ten years from 1984 to 1993.

First, average real cumulated earnings of men aged 18 to 24 (at the beginning of the periods considered) fell 11% or by roughly \$27,000 between these periods (Table 3.7). In contrast, earnings of men 35 to 44 years rose a modest 4%. Second, the age-earnings profile of the sampled workers reveals that in 1984 real annual earnings of men 18 to 24 were 20% lower than those of their counterparts in 1975 (see year 1 in Figure 3.3). This gap narrowed to 10% five years later (in year 6) but did not disappear by the end of the period.<sup>1</sup> The same story holds for 21 to 24 year olds and for those 25 to 29 years of age. However, real earnings of cohorts of 35 to 44 year olds exhibit a different pattern. Specifically, after the third year, the real earnings of those 35 to 44 in 1984 lie well above those who were the same age in 1975.

One could argue that the downward shift in the age-earnings profile of men aged 21 to 24 can be explained **entirely** by the growth of individuals combining full-time school and part-time work. There are, however, two problems with this reasoning. First, while this argument may explain

part of the gap between the real earnings of the 1984 cohort and those of the 1975 cohort during the first years of the period (that is, more young men combining school and part-time work and thus receiving relatively low earnings), it can hardly explain why a gap still remains after ten years of observations. Second, data from the Survey of Consumer Finances show that a similar shift is observed among men aged 21 to 24 who work full-year full-time (Figure 3.4). Thus, the growing importance of individuals combining school and part-time work cannot be the whole story.

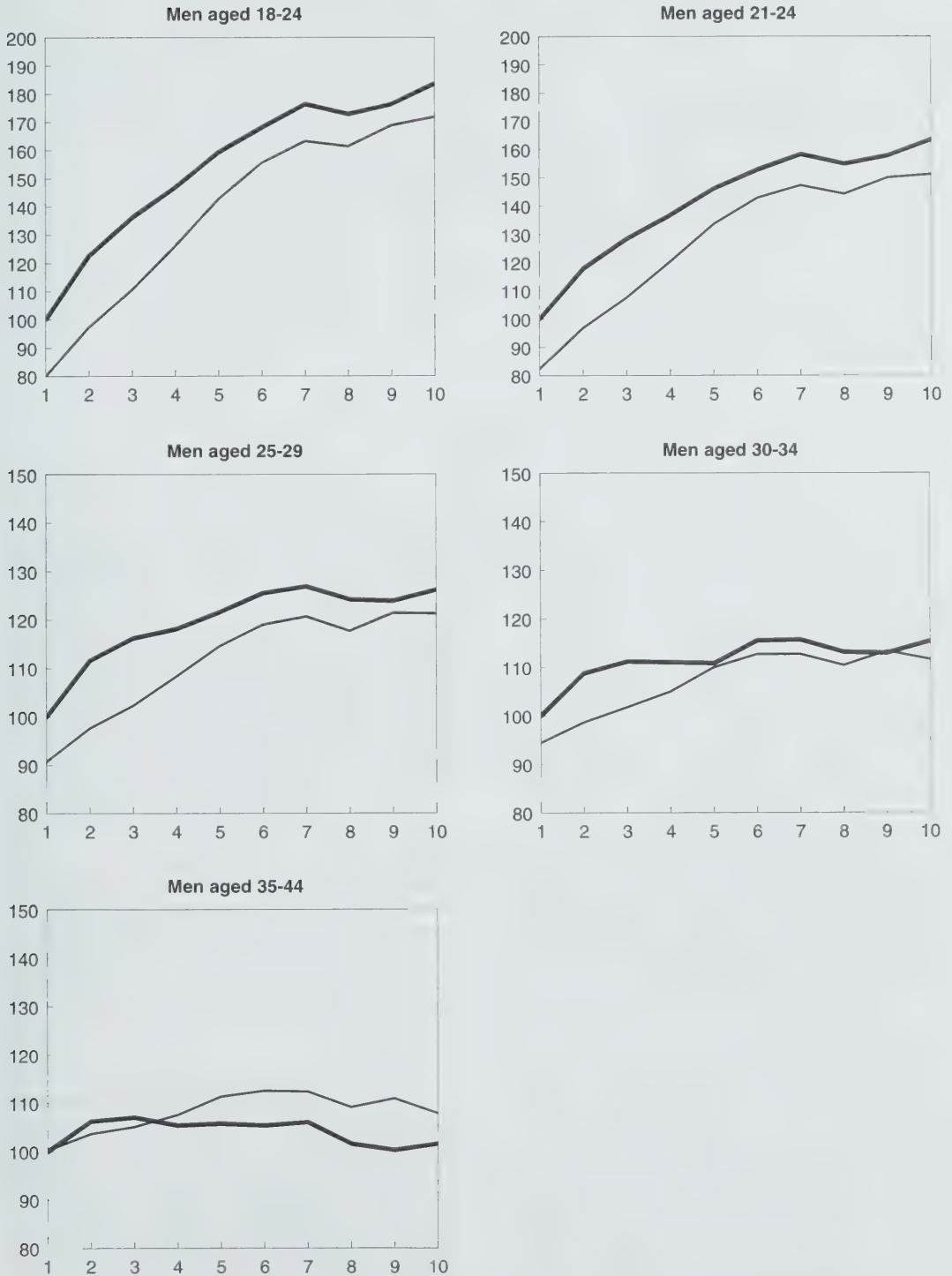
An alternative explanation is that this downward shift in youth age-earnings profile could simply be due to higher unemployment rates during the second period: once cyclical effects are taken into account the age-earnings profile could have remained unchanged. To deal with this issue, the natural logarithm of real earnings of individual *i* at time *t*, *y*(*i*,*t*), is modeled as:

$$y(i,t) = \beta_0 + \beta_1 X(i,t) + \beta_2 URate(i,t) + u(i,t) \tag{3.1}$$

where *u*(*i*,*t*) is a random term, *URate*(*i*,*t*) is the regional unemployment rate of men aged 25 to 54 and *X*(*i*,*t*) is a vector containing the following explanatory variables: five regional dummies; a quadratic in age; two cohort dummies (cohort79=1 if individuals are 21 to 24 in 1979, and 0 otherwise; cohort83=1 if individuals are 21 to 24 in 1983, and 0 otherwise); and four interaction terms between the cohort effects and the quadratic in age. The cohort dummies allow the **intercept** of the age-earnings profile to vary across cohorts, while the interaction terms allow the **slopes** of the age-earnings profiles to vary. The 1975 cohort is used as the reference group.



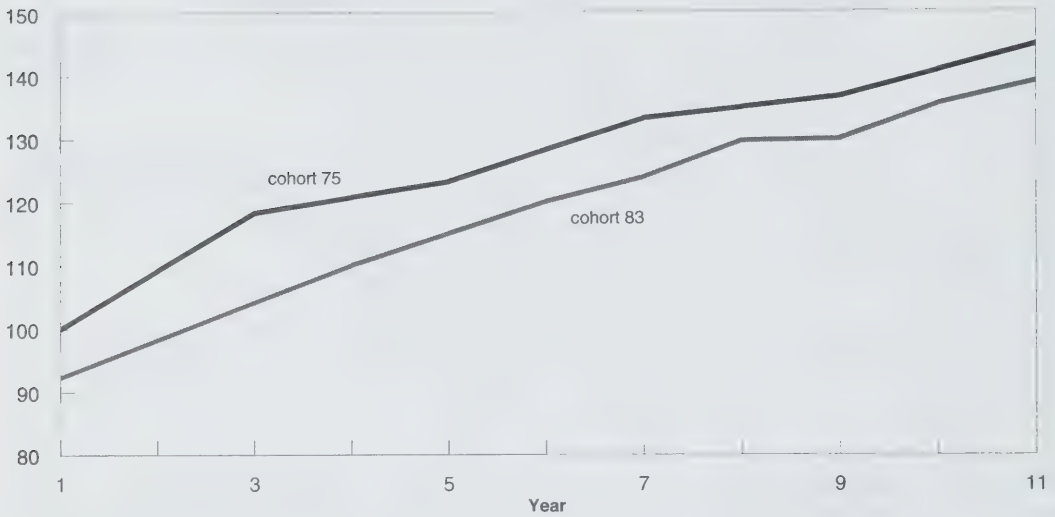
Figure 3.3  
**Real Earnings Path of Men Between 1975 and 1984,  
 and Between 1984 and 1993**



**Note:** The thick (thin) line shows real annual earnings which workers aged x-y in 1975 (1984) received during the 1975-84 (1984-93) period. Real annual earnings are expressed relative to those received in 1975 by workers aged x-y in 1975.

**Source:** T4 data.

Figure 3.4  
**Real Earnings of Synthetic Cohorts of Men Working Full-Year Full-Time  
 (21 to 24 Years of Age at the Beginning of the Period)**



*Source: Survey of Consumer Finances.*

I focus on men aged 21 to 24, rather than on those aged 18 to 24, in order to reduce the influence of the growth in school enrollment on the results. (It is impossible to distinguish full-year full-time workers from other workers because the T4S contains no information on hours worked.) This regression is run on a sample that pools three cohorts: [1] men aged 21 to 24 in 1975 with positive earnings between 1975 and 1985; [2] men aged 21 to 24 in 1979 with positive earnings between 1979 and 1989; and [3] men aged 21 to 24 in 1983 with positive earnings between 1983 and 1993. This is done in order to take full advantage of the information included in the data. (Since the observation period is from 1975 to 1993, choosing four-year birth cohorts allows three different cohorts of workers to be followed over eleven years.)

I first assume that the random term  $u(i,t)$  is independent across individuals (no cross-sectional correlation), has the same variance across individuals (no cross-sectional heteroscedasticity), and is independent across years for a given individual (no serial correlation). These assumptions permit the use of Ordinary Least Squares (OLS). I then allow for first-order serial correlation and reestimate the model using feasible generalized least squares (FGLS).<sup>2,3</sup> The regression results for selected coefficients using Least Squares and FGLS are presented in Table 3.8. As expected, annual earnings are negatively

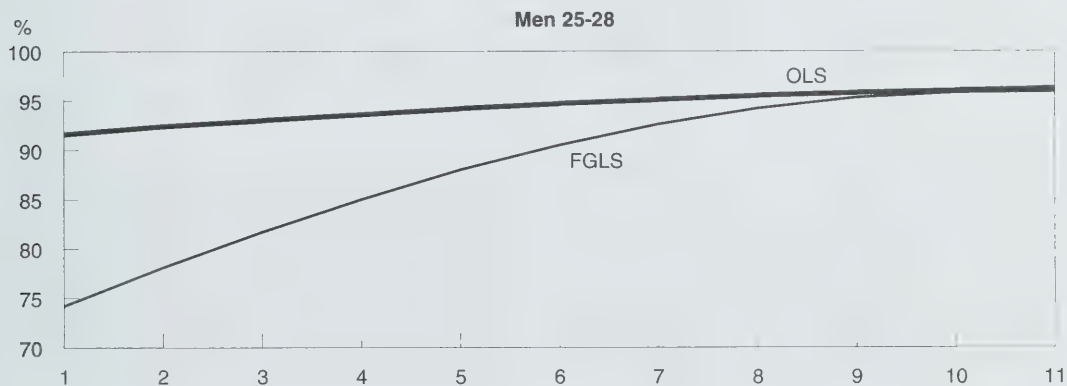
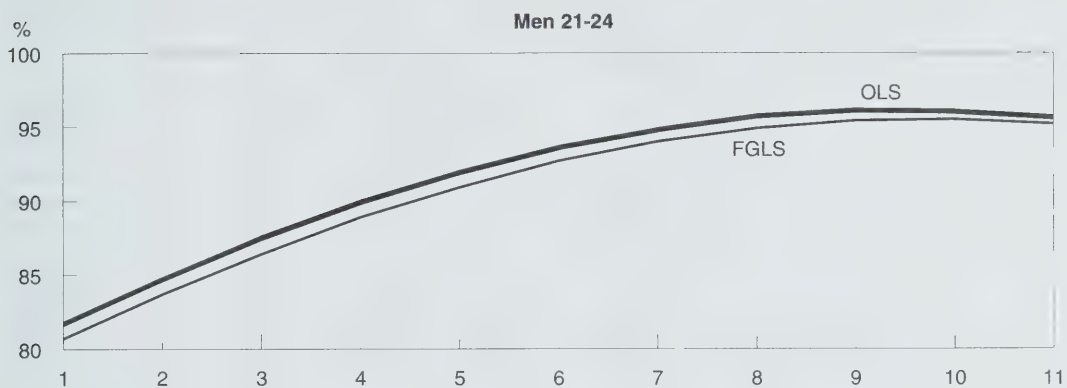
correlated with unemployment. The dummy variable for the 1983 cohort and the interaction terms between the cohort dummy and the quadratic term in age are significant, suggesting that the age-earnings profile of the 1983 cohort does differ from that of the 1975 cohort. To see how they differ, we plot the relative age-earnings profile that would have been observed had the unemployment rate been the same for both cohorts.

The first panel of Figure 3.5 suggests that even if unemployment rates had been the same for both cohorts, real earnings of the 1983 cohort would have still started at a much lower level than those of the 1975 cohort, would have approached those of the 1975 cohort as individuals aged, but would have remained roughly 5% lower even after ten years in the labour market. This is evidence that lifetime earnings of youth have fallen.

This exercise is repeated for four-year birth cohorts of men aged 25 to 28 and 41 to 44, and the results shown in Table 3.8 and the second and third panels of Figure 3.5. Contrary to the findings for men aged 21 to 24, Least Squares and FGLS yield strikingly different results. In particular, the coefficients of cohort83 and the two interaction terms change drastically when a correction for first-order serial correlation is applied.

Why do these coefficients change so much? One possibility is that cohort effects may be hard

Figure 3.5  
**Estimated Age-Earnings Profile of the 1983  
 Cohort Relative to the 1975 Cohort**



OLS: Ordinary Least Squares Method

FGLS: Feasible Generalized Least Squares



Table 3.8  
Regression Results from Longitudinal Data

Selected Coefficients	Men Aged 21-24		Men Aged 25-28		Men Aged 41-44	
	Least Squares	FGLS	Least Squares	FGLS	Least Squares	FGLS
Age	0.356 (26.07)	0.114 (2.79)	0.205 (14.35)	-0.111 (2.28)	0.089 (3.13)	-0.286 (2.22)
Age Squared/100	-0.537 (21.53)	-0.149 (2.21)	-0.277 (12.20)	0.165 (2.36)	-0.097 (3.23)	0.250 (2.04)
Cohort83	-2.15 (8.21)	-2.14 (2.49)	-0.519 (1.65)	-3.6 (3.05)	-2.49 (2.68)	-17.33 (3.73)
Cohort83 x Age	0.139 (7.25)	0.136 (2.40)	0.025 (1.25)	0.2 (2.95)	0.107 (2.74)	0.668 (3.80)
Cohort83 x (Age Squared/100)	-0.228 (6.59)	-0.222 (2.36)	-0.033 (1.03)	-0.282 (2.88)	-0.111 (2.70)	-0.644 (3.85)
Unemployment Rate	-0.027 (25.93)	-0.025 (24.57)	-0.021 (22.25)	-0.019 (21.24)	-0.015 (12.45)	-0.014 (13.65)
rho*		0.681 (377.48)		0.728 (414.29)		0.822 (404.04)
Sample Size	172,040	156,400	169,620	154,200	100,529	91,390

\* The dependent variable is the natural logarithm of real annual earnings. The full set of regressors is: an intercept; four regional dummy variables; regional unemployment rate of men 25 to 54; two dummy variables for the 1983 and 1979 cohorts (the 1975 cohort is the omitted category); age; age squared; four interaction terms between the cohort dummies and the quadratic term in age. The model is estimated both with Least Squares and with feasible generalized least squares (FGLS) assuming first-order serial correlation. The coefficient for rho is derived by regressing  $res(i,t) = \rho \cdot res(i,t-1) + v(i,t)$ , where  $res(i,t)$  and  $res(i,t-1)$  are residuals (from least squares) for individual  $i$  at time  $t$  and  $v(i,t)$  is a white noise error. T statistics are in parentheses. The sample size equals  $N$  times  $T$ , where  $N$  is the number of individuals and  $T$  is the number of periods in the panel. For this sample  $T = 11$ . When FGLS is used the first observation is deleted for each individual and thus the sample size then equals  $N$  times  $T-1$ .

Source: Revenue Canada's T-4 supplementary file.

to identify once we start correcting for first-order serial correlation. If  $\rho=1$  and one were to transform the data and apply generalized least squares, the cohort effects (in levels) would not be identified. It is possible that even though  $\rho$  equals only 0.73 in our models, we start losing identification of the cohort effects when the correction for autocorrelated residuals is applied. The fact that the coefficients of the cohort effects change more than the coefficients of some other explanatory variables (the unemployment rate and the regional dummies) is consistent with that conjecture.

In any event, although the results are mixed (in terms of the estimated age-earnings profile of the 1983 cohort relative to that of the 1975 cohort) for men aged 25-28 and men aged 41-44, both raw data and the regression results from LS and FGLS provide evidence that (for men

aged 21 to 24) the age-earnings profile of the 1983 cohort has shifted downward relative to that of the 1975 cohort even after removing cyclical effects. Estimated earnings from OLS coefficients suggest that men aged 24 in 1983 experienced a cumulative earnings loss of \$16,430 (in 1989 constant dollars) during an eleven-year period compared to men aged 24 in 1975. (Furthermore, estimated earnings from LS coefficients suggest that in 1983, men aged 24 earned \$16,923 while in 1975, men aged 24 received \$19,278.) Thus, the long-term effects of the drop in youth real wages appear (at least for 21 to 24 year olds) to be far from negligible.

4. Upward Earnings Mobility

The decline in youth real earnings measured on a cross-sectional basis and the downward shift

of the age-earnings profile suggest that today's young workers will spend a greater fraction of their career receiving low earnings than their counterparts did in the mid-seventies. This would be so, simply because they start at lower wages and do not catch up even after ten years.

A related issue is whether the chances of moving out of the bottom of the real earnings distribution have changed in the 1980s **after** controlling both for cyclical effects and for any drop in their earnings. In other words, net of cyclical effects and of changes in real earnings, the duration of spells of low earnings experienced by young workers may have increased over the last decade. This could happen if changes in firms' hiring practices (due to greater competition and/or technological changes) led more young men to be trapped in non-permanent jobs that would offer little or no prospect for career advancement and would therefore lower the speed at which they cross different earning thresholds.

In pursuing this issue, the first task is to define a low-earnings threshold. Since any definition is arbitrary, two thresholds are selected to measure transitions into the bottom of the earnings distribution. The first is set at \$13,509 (in 1993 dollars) and is close to Statistics Canada's low-income cut-off (LICO) for one adult living in an urban area of less than 30,000 people (\$13,063). The second is \$21,073 (in 1993 dollars) and approximates the LICO for a family of two people living in an urban area of at least half a million people (\$20,603). For simplicity, these two thresholds will be referred to as being equal to \$13,000 and \$21,000 respectively.

It is well known that the fraction of male earners who receives low earnings has increased during the 1980s. The relative importance of low earners has increased in all age groups, especially among males under 35. For instance, Morissette and Bérubé (1996) show that 23% of male earners 25 to 34 years received less than \$21,000 in 1975, compared to 40% in 1993.

To examine whether the duration of spells of low earnings has changed through time, I first calculate the fractions of new spells of low earnings started by young men between 1976 and 1992 lasting **at least** 2 years, 3 years, 4 years, and so on.<sup>4,5</sup> A spell of low earnings is defined to begin when a worker starts receiving **positive** earnings less than \$13,000 or \$21,000. It ends either when a worker stops receiving earnings **next year** or when he starts receiving higher earnings **next year**. It is right-censored (that is, incomplete) if a worker is still earning less than

\$13,000 or \$21,000 in 1993, the last year of available data.

Table 3.9 shows the results of this exercise. Of all men who start earning less than \$13,000 (\$21,000) in a given year, roughly 40% (50%) remain in that state for at least two years. A quick examination of the table reveals that the chances of remaining in the bottom of the earnings distribution for a given number of years are affected by macroeconomic conditions. Hence, to test whether or not spells of low earnings lasted longer in the 1980s than in the 1970s, we have to control for business cycle effects.

The duration of a spell of low earnings is likely to depend not only on macroeconomic conditions prevailing at the **beginning** of the spell, but also on those prevailing during the years **following** the beginning of that spell. It should also depend on workers' real earnings at time  $t$ . Other things being equal, the greater the distance between workers' real earnings and the threshold used to define low earnings, the less likely a worker is to move out of the bottom at time  $t+1$ . An empirical framework incorporating time-varying covariates is needed to take these issues into account. Even if the endings of all spells were observed, conventional regression analysis (the use of Least Squares to model the duration of spells of low earnings as a function of certain explanatory variables) would not deal with this problem. To incorporate time-varying covariates, we need to use a duration model (Kiefer, 1988).

Since the unit of time used to analyze spells of low earnings is long (one year) relative to the total period of observation (19 years for the period 1975 to 1993), and since spells of low earnings cannot take place at any time, a duration model based on discrete time analysis is used. Specifically, a logit model is used to estimate the probability of a spell ending in a given year.

To estimate the probability of an individual leaving the bottom of the earnings distribution at time  $t+1$ , a data set whose unit of observation is a spell-year of low earnings is constructed. Put simply, if a spell of low earnings lasts seven years, there will be seven observations associated with that spell in the data set. For each spell-year, the following explanatory variables are included: four regional dummies; a regional unemployment rate (specific for each age group) at time  $t$ ; the distance between workers' earnings at time  $t$  and the threshold used to define low earnings; a set of spell length dummies; and a dummy variable equaling 1 from 1985 onward and 0 otherwise. The regional dummies allow the hazard rates (the

Table 3.9  
The Fraction of Low Earnings Spells Lasting at Least a Given Number of Years

	Year in Which a Spell of Low Earnings Began																
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
A. Low Earnings Defined as Less Than \$13,509 in 1993 Dollars																	
2 Years	39.1	41.0	39.0	40.2	40.3	45.4	46.9	46.8	47.3	47.7	44.4	45.0	44.1	44.2	45.9	45.8	45.2
3 Years	19.2	19.0	20.1	20.5	21.4	25.9	24.5	25.9	26.7	26.2	24.1	24.2	23.0	24.6	25.0	24.4	
4 Years	10.1	11.0	11.1	11.4	12.8	15.3	14.4	15.3	16.1	14.9	14.2	13.9	14.1	14.1	15.2		
5 Years	6.0	6.9	7.1	7.5	8.3	9.2	8.9	9.1	10.2	9.1	8.6	8.1	8.8	9.0			
6 Years	3.9	4.3	4.9	5.2	5.0	5.6	5.6	5.7	6.6	5.3	5.4	5.5	5.7				
7 Years	2.5	3.2	3.4	3.8	3.5	3.9	3.6	3.7	4.2	3.7	3.6	3.7					
8 Years	1.6	2.4	2.6	2.5	2.4	2.7	2.5	2.6	2.9	2.6	2.4						
9 Years	1.1	1.6	1.9	1.8	1.7	2.1	1.8	1.9	2.0	1.9							
10 Years	1.0	1.4	1.4	1.3	1.2	1.7	1.3	1.5	1.6								
Number of Spells	3,775	4,129	4,280	4,087	4,452	4,659	5,667	5,976	5,446	5,269	5,365	5,272	5,147	5,272	5,674	6,323	6,062
B. Low Earnings Defined as Less Than \$21,073 in 1993 Dollars																	
2 Years	48.4	49.7	48.8	51.2	50.8	55.7	55.8	56.4	57.0	57.8	56.4	56.3	54.0	53.7	57.0	54.0	53.9
3 Years	28.3	28.6	28.6	31.7	32.3	36.7	34.0	36.3	37.7	37.6	35.4	34.9	33.8	34.9	36.7	33.3	
4 Years	18.1	18.8	18.6	21.0	23.0	25.8	23.0	24.9	26.4	25.5	24.4	24.0	23.7	23.3	25.9		
5 Years	12.3	13.5	12.0	15.1	17.0	18.5	16.0	17.8	19.2	18.4	17.3	16.9	16.9	16.6			
6 Years	8.9	9.5	8.6	11.3	12.6	13.2	11.3	12.5	14.0	13.2	12.5	12.9	12.6				
7 Years	6.7	7.6	6.5	8.5	9.1	9.4	8.3	9.0	10.8	10.0	9.1	9.6					
8 Years	5.3	5.7	5.4	6.5	7.0	6.8	6.3	6.6	8.4	7.6	6.9						
9 Years	4.3	4.6	4.1	4.9	5.4	4.9	4.8	5.2	6.5	6.0							
10 Years	3.4	3.8	3.3	3.9	4.2	3.8	3.8	4.0	5.1								
Number of Spells	4,201	4,692	4,841	4,693	5,109	5,218	6,206	6,375	5,721	5,608	5,652	5,620	5,487	5,762	6,127	6,614	6,182

**Note:** Table entries refer to new spells of low earnings started by male workers who were 18 to 50 at the beginning of the spell. Incomplete spells as well as completed spells are included.



chances of ending a spell of low earnings given that one has been in that state for a given number of years) to vary across regions. This may happen if regions vary in the diversification of their industrial structure. If so, opportunities for moving from a low-wage industry to a high-wage industry—and thus the degree of upward mobility—may differ across regions.

The age/region-specific unemployment rate is used to control for business cycle effects. The distance between workers' earnings at time  $t$  and the low earnings threshold allows us to measure the rate of mobility conditional on workers' earnings. The set of spell length dummies are used to estimate the slope of the hazard rates.<sup>6</sup> I also test whether workers' chances of leaving the bottom of the earnings distribution are (after controlling for cyclical effects and changes in real earnings) lower during the second half of the 1975-1993 period than during the first half by including a dummy variable equalling 1 in 1985 and 0 afterwards. The use of this variable is based on the assumption that the expansion period of the second half of the 1980s was, in some sense, different from previous expansion periods. Specifically, increases in competition induced by the growth of international trade and technological changes may have led firms to increase the flexibility with which they manage their workforces. Firms may have increased the number of temporary, part-time or contract workers, especially among young workers. If this were the case, the rate at which youth earnings would grow could decrease and thus, youth upward mobility could have dropped.

A **multinomial logit** model is used because spells of low earnings may end in two different ways: a worker may stop receiving earnings or may start receiving earnings higher than \$13,000 or \$21,000 next year (Hosmer and Lemeshow 1989). Since earnings mobility is likely to differ across age groups, the model is estimated separately for the three following age groups defined at the beginning of the spell: 18 to 24 years; 25 to 34 years; and 35 to 50 years. The model is also estimated for each of the two thresholds, \$13,000 and \$21,000. The dependent variable equals: 0 if a worker remains in the bottom of the earnings distribution at time  $t+1$ ; 1 if he stops receiving earnings at time  $t+1$ ; and 2 if he starts receiving higher earnings next year at time  $t+1$ .<sup>7</sup> (The detailed estimation results are available upon request as an appendix to this chapter.)

Two facts emerge for workers under 35 regardless of the threshold used. First, after

controlling for cyclical effects, the chances of leaving a state of low earnings are slightly lower from 1985 on than before 1985. Second, the longer a worker has been receiving low earnings, the smaller are the chances of ending a spell of low earnings.<sup>8</sup> Why this is so is unclear. At least two explanations can be put forward (Bane and Ellwood 1986). One possibility is that, for given observable as well as an unobservable characteristics, it may be harder for workers to escape the bottom of the earnings distribution as time elapses. Long periods of low earnings could make it increasingly difficult for workers to get high-paying jobs that allow them to move up in the earnings distribution. A second possibility is that workers are heterogeneous in terms of unobserved abilities. Some workers can have low and constant exit rates while others can have high and constant exit rates. As time elapses, the former account for a larger fraction of spells. As a result, the declining exit rate observed in the aggregate could result from this mixture of group-specific exit probabilities.

To illustrate, the probability of a worker moving out of the bottom of the earnings distribution next year, given that he has been receiving low earnings for a given number of years, is presented in Table 3.10. This probability is the sum of the probability of moving down (of receiving no earnings next year) and the probability of moving up (receiving higher earnings next year). Estimates of these two probabilities are also offered.<sup>9</sup> The numbers are calculated by assuming an unemployment rate of 10%, 6%, and 4% for male workers aged 18 to 24, 25 to 34 and 35 to 50 respectively.<sup>10</sup> Furthermore, they are based on the mean distance (defined for each age group) between workers' earnings and the low earnings threshold.

As indicated in Table 3.10 the probability of moving out of the low earnings area has dropped slightly among workers under 35. For these employees, the lower exit probabilities are mainly due to falling chances of moving up in the earnings distribution. For instance, among males aged 18 to 24, the probability of moving up after receiving less than \$21,000 for two years dropped from 16% in 1976-84 to 13% in 1985-92. This probability dropped from 22% to 20% among males aged 25-34 and remained unchanged at 21% for males aged 35-50, suggesting no decline in upward mobility for older workers. Results not shown here indicate that these qualitative conclusions hold when the \$13,000 earning threshold is considered.

Table 3.10  
Probabilities of Escaping Low Earnings by Length of the Spell and Type of Exit

Year	Probability of No Earnings		Probability of Higher Earnings		Total Probability of Escaping	
	1976-84	1985-92	1976-84	1985-92	1976-84	1985-92
A. Spells of Low Earnings Started by Men 18 to 24 at the Beginning of the Spell						
			percentage			
1	13.9	13.0	18.7	15.5	32.5	28.6
2	13.5	12.6	15.7	12.9	29.2	25.5
3	12.0	11.2	14.4	11.8	26.5	23.0
4	11.6	10.8	13.4	11.0	25.1	21.8
5	12.0	11.1	13.6	11.2	25.6	22.3
6	10.5	9.7	13.0	10.6	23.5	20.3
7	11.5	10.6	10.8	8.8	22.2	19.3
8	10.1	9.3	10.8	8.7	20.9	18.1
9	11.1	10.2	10.5	8.5	21.6	18.7
10 or More	11.3	10.3	7.4	5.9	18.6	16.2
B. Spells of Low Earnings Started by Men Aged 25 to 34 at the Beginning of the Spell						
			percentage			
1	20.6	20.3	27.3	25.4	47.9	45.6
2	17.7	17.3	21.7	20.0	39.4	37.3
3	16.2	15.8	17.8	16.4	34.1	32.2
4	15.6	15.1	15.3	14.0	30.8	29.1
5	14.1	13.6	12.8	11.7	26.9	25.2
6	13.4	13.0	12.0	10.9	25.5	23.9
7	12.7	12.2	10.7	9.7	23.4	21.9
8	13.7	13.2	9.4	8.5	23.1	21.7
9	13.6	13.0	7.4	6.7	21.0	19.7
10 or More	11.2	10.7	6.1	5.5	17.3	16.2
C. Spells of Low Earnings Started by Men Aged 35 to 50 at the Beginning of the Spell						
			percentage			
1	23.2	23.2	27.7	27.7	50.9	50.9
2	19.3	19.3	20.9	20.9	40.2	40.2
3	16.7	16.7	14.3	14.3	31.1	31.1
4	15.4	15.4	12.2	12.2	27.6	27.6
5	13.3	13.3	11.0	11.0	24.3	24.3
6	13.5	13.5	9.1	9.1	22.5	22.5
7	12.0	12.0	8.3	8.3	20.2	20.2
8	11.0	11.0	7.4	7.4	18.3	18.3
9	11.6	11.6	5.2	5.2	16.8	16.8
10 or More	11.2	11.2	4.4	4.4	15.6	15.6

**Note:** Low earnings refers to less than \$21,073 in 1993 constant dollars. The numbers presented in this table assume that the unemployment rate equals 10%, 6% and 4% for men aged 18 to 24, 25 to 34 and 35 to 50, respectively. For men aged 35 to 50, the probabilities are the same for both periods because the dummy variable which equals 1 in 1985 and afterwards is not statistically significant at the 5% level.

Thus, even after removing cyclical effects and any drop in real earnings, the duration of spells of low earnings appears to have risen in the 1980s among young workers. Why do young workers now take longer to move up in the earnings distribution than they used to? One explanation is that more and more young individuals work part-time while they attend school full-time. (The percentage of individuals aged 18 to 24 who were employed while attending school rose from 8.9% to 19.6% between 1976 and 1993.) As a result, a larger fraction of youth could receive low earnings for a long period of time simply because more of them now combine part-time work and school.

A second explanation is that young men who have already made a transition from school to work may now face greater problems getting access to well paid permanent jobs than their counterparts did in the 1970s. As indicated in Table 3.5, many young workers who are no longer at school are now either involuntary employed part-time or hold temporary jobs. This may affect the speed at which they move up in the real earnings distribution.

A third explanation could be that some of the workers under 35 lack the skills or education in demand on the labour market. Since the T4S contains no information on school attendance or education levels, it is impossible to disentangle the relative contribution of each of these factors. The fact that the relative unemployment rate of low-educated young workers has increased in the 1980s is consistent with that view. Between 1981 and 1989, the ratio of the unemployment rate of individuals with 0 to 8 years of schooling to that of university graduates rose from 3.0 to 3.9 among individuals 15 to 24 and from 3.3 to 3.7 among 25 to 34 year olds.

A fourth explanation relies on the possibility that unobserved heterogeneity could explain part of the decrease in youth upward mobility. Specifically, if spells of low earnings in the 1980s are concentrated to a greater extent on low-skilled workers (who should be expected to have low exit rates) than they were in the mid-seventies, the hazard rates may have shifted downwards because of this composition effect. Hence, the decrease in upward mobility among young workers should be interpreted with caution. It could reflect both a true decline in exit rates for all types of workers or it could reflect the greater concentration of spells of low earnings on low-skilled

workers (without any change in group-specific exit rates).

## 5. Conclusion

In **absolute** terms, employment, unemployment and underemployment rates of young men are now worse than they were either prior to the 1990-92 recession or indeed twenty years ago. Because the employment outcomes of older workers have also deteriorated during the period considered, young males, **relative** to their older counterparts, are not worse off than they were twenty years ago.

The same story does not apply to wages. Both in real terms and relative to those of older employees, hourly wages and annual earnings of young men have fallen substantially since 1981. The fact that the age-earnings profile of recent cohorts of young men has deteriorated relative to that of previous cohorts (even after removing cyclical effects) suggests that the drop in youth wages has had long-term effects. At the very least, earnings cumulated by young men over a period of ten years have been affected.

Even after controlling both for cyclical effects and any drop in their real earnings, young men appear to take more time to move up in the earnings distribution now than they used to do in the mid-1970s. The growth in the relative importance of students combining school and part-time work, the (assumed) greater difficulty of youth getting access to well paid permanent jobs, the lack of appropriate skills for some low-educated young men, and unobserved heterogeneity could explain this pattern.

Taken together, these findings raise at least two questions. First, what factors have led youth wages to fall? A fast-growing literature on earnings inequality has not yet provided a satisfactory answer. One of the leading explanations, the hypothesis of skill-biased technological change, is hard to reconcile with the idea that young workers are the most likely to be able to work with new processes and recently developed technologies. Second, will the downward shift in the age-earnings profile of recent cohorts of young workers translate into a decrease in their lifetime earnings or will it eventually be offset by faster growth of earnings in the years to come? Whatever answers are given to these questions, today's young Canadians do face a quite different labour market than their counterparts a generation earlier.



## Appendix

The T4 supplementary tax file (T4S), covering the years 1975 through 1993, is the major data set used. The analysis sample is based on 1% sample of all personal tax records received by Revenue Canada. Specifically, it consists of 1% of individuals who received a T4S form and filed a T1 tax form in **at least one year** between 1975 and 1993. The file was constructed by merging employers' T4S with T1 records.

Employers have to complete a T4 supplementary form when: income tax, contributions to the Canada/Quebec Pension Plan (C/QPP), or contributions to the Unemployment Insurance (UI) program have to be deducted from an employee's pay; or when the annual earnings of an employee exceeds a certain threshold. The threshold was \$250 between 1975 and 1988, and \$500 afterwards. Income tax has to be deducted whenever an employee's annual **income** (annual wages plus income from other sources such as interest and dividends) exceeds his or her personal exemption. In most cases, the underlying annual wages should be higher than the thresholds of either \$250 or \$500. Contributions to C/QPP have to be deducted whenever the annual wage of an employee exceeds the Yearly Basic Exemption (YBE). The YBE amounts roughly to 10% of the average industrial annual wage and thus exceeds the thresholds of \$250 and \$500. Contributions to UI have to be deducted from an employee's pay whenever he or she works more than a certain number of hours per week (15 hours in 1993) or earns more than a given amount per week (\$149 in 1993).

Since the thresholds associated with income taxation (the personal exemption) or with C/QPP contributions (the YBE) exceed \$250 or \$500, most jobs require a remittance of a T4. However, this may not be the case when individuals earn more than the UI threshold on a weekly basis (or work more hours per week than the minimum number required) yet earn less than either \$250 or \$500 on an annual basis. Such cases are likely of very limited importance.

A two-step procedure is used to derive a sample that is consistent over time. First, all jobs with annual wages less than \$250 in 1975 constant dollars are excluded from the analysis. The resulting thresholds equal \$250 in 1975, \$645 in 1989 and \$738 in 1993. Then annual earnings are derived by summing earnings from all remaining jobs an individual holds in a given year. Thus, unless otherwise stated, **the earning concept**

**used consists of annual earnings resulting from jobs that paid at least \$250 in 1975 constant dollars.** This implies that reference to "workers with no earnings" includes not only workers who did not receive any wages during the reference year, but also those whose earnings were (in total) based on jobs that paid less than \$250 per year in 1975 constant dollars. The term "workers with no earnings" should be viewed as referring to workers who did not have a meaningful spell of employment during the reference year. A related point is that the earnings concept used excludes any income from self-employment. Thus, an individual whose annual earnings drop from year  $t$  to  $t+1$  but who starts receiving income from self-employment in year  $t+1$  could start a new spell of low earnings in year  $t+1$  even though his employment income (the sum of annual wages and salaries plus self-employment income) had remained unchanged between these two years. More generally, transitions of individuals from paid work into self-employment are excluded from the analysis.

## Notes

The author wishes to thank the anonymous referees for their comments on an earlier draft. However, the final responsibility for the analysis rests solely with the author, and in particular should not be attributed to Statistics Canada.

<sup>1</sup> In other words, real annual earnings in 1989 of men aged 18 to 24 in 1984 (and who were thus 23 to 29 in 1989) were 10% lower than earnings received in 1980 by men aged 18 to 24 in 1975 (who were 23 to 29 in 1980).

<sup>2</sup> To do so, I proceed in two steps. First, I estimate  $\rho$ , the autocorrelation coefficient, through the following regression:  $\text{res}(i,t) = \rho \text{res}(i,t-1) + v(i,t)$ , where  $\text{res}(i,t)$  and  $\text{res}(i,t-1)$  are the residuals from Least Squares estimation of equation (3.1) for individual  $i$  at time  $t$  and  $t-1$ , and  $v(i,t)$  is a random error. Second, I omit the first observation for each individual, transform the data and regress the following equation by Least Squares:  $y(i,t) - \rho y(i,t-1) = b_0(1-\rho) + b_1(X(i,t) - \rho X(i,t-1)) + b_2(\text{URate} - \rho \text{URate}(i,t-1))$ .

<sup>3</sup> One way to test for first-order serial correlation is to regress the residuals from the first-stage regression,  $\text{res}(i,t)$ , on  $\text{res}(i,t-1)$  as well as on all the regressors used in the first-stage regression. If the resulting coefficient for  $\text{res}(i,t-1)$  is significant, then the null hypothesis of no first-order serial correlation can be

rejected (Davidson and MacKinnon 1993, 357-58).

<sup>4</sup> As is well-known, neither the average duration of new spells in progress nor the average duration of new completed spells can provide unbiased estimates of the true duration of new spells of low earnings.

<sup>5</sup> Spells of low earnings for which we observe the beginning are first available in 1976 or after. If a male worker has low earnings in 1975, it cannot be determined whether he started receiving low earnings in 1975 or before since there are no data prior to 1975. Similarly, spells of low earnings started in 1993 cannot be included in the analysis because it is not known whether these spells ended the following year or not. For this reason, the analysis is based on spells started between 1976 and 1992.

<sup>6</sup> Nine spell length dummies are included. Using a set of spell length dummies allows a very flexible specification of the probabilities of ending a spell of low earnings, given that one has been receiving low earnings for a certain number of years. The hazard rates can be monotonically increasing or decreasing through time, have a U-shape, an inverted U-shape, or exhibit other non-linear trends.

<sup>7</sup> The analysis is based on spells started by men of a given age group at the **beginning** of the spell. The sample consists of spells of low earnings started between 1976 and 1992. The former is the first year for which I observe the beginning of a spell and the latter is the last year for which I know whether or not a person left the bottom of the earnings distribution at time  $t+1$ .

<sup>8</sup> There are some exceptions. For instance, if low earnings are defined as those under \$13,000, the chances of moving out of the bottom of the earnings distribution are, among males aged 35-50, higher if the spell has lasted 8 years than if it has lasted 7 years.

<sup>9</sup> The probabilities are calculated as follows. The dependent variable is subject to three events. It equals: 0 if a spell is not completed during a given year; 1 if a spell ended with the worker moving down; 2 if a spell ended with the worker moving up. Let  $b_1$  and  $b_2$  be the two vectors of coefficients associated with the vector of explanatory variables  $X$ . Then, the probability of a worker moving down equals:  $\exp(b_1X) / [1 + \exp(b_1X) + \exp(b_2X)]$ . Similarly, the probability of moving up equals:  $\exp(b_2X) / [1 + \exp(b_1X) + \exp(b_2X)]$ . The

probability of a spell **not** ending during a given year equals one minus the sum of these last two probabilities.

<sup>10</sup> To assess the impact of the business cycle on workers' chances of leaving the bottom of the earnings distribution, I recalculated the aforementioned probabilities assuming unemployment rates of 14%, 9% and 6% for men in the three age groups. For all age groups and for both thresholds, these higher unemployment rates led to lower probabilities of moving out, moving down and moving up. Thus, high unemployment rates appear to decrease the upward mobility (defined in real terms) of low earners.

## Bibliography

- BANE, M.J. and D.T. ELLWOOD (1986). "Slipping in and out of Poverty: the Dynamics of Spells." *Journal of Human Resources*. Vol. 1, 1-23.
- BEACH, C.M. and G.A. SLOTSVE (1994). "Polarization of Earnings in the Canadian Labour Market." *Bell Canada Papers on Economic and Public Policy*. Vol. 2. Kingston: Queen's University, John Deutsch Institute for the Study of Economic Policy.
- BETCHERMAN, G. and R. MORISSETTE (1994). "Recent Youth Labour Market Experiences in Canada." Ottawa: Statistics Canada, Analytical Studies Branch Research Paper No. 63.
- COX, D.R. (1972). "Regression Models and Life Tables." *Journal of the Royal Statistical Society*. Vol. 34, Series B, 187-220.
- COX, D.R. and D. OAKES (1984). *Analysis of Survival Data*. London: Chapman & Hall.
- DAVIDSON, R. and J.G. MACKINNON (1993). *Estimation and Inference in Econometrics*. Oxford: Oxford University Press.
- HOSMER, D.W. and S. LEMESHOW (1989). *Applied Logistic Regression*. New York: John Wiley and Sons.
- KATZ, L.F. and K.M. MURPHY (1992). "Changes in Relative Wages, 1963-1987: Supply and Demand Factors." *Quarterly Journal of Economics*. Vol. 107, 35-78.
- KIEFER, N. (1988). "Economic Duration Data and Hazard Functions." *Journal of Economic Literature*. Vol. 26, 646-679.

MORISSETTE, R. (1995). "Why has Inequality in Weekly Earnings Increased in Canada?" Ottawa: Statistics Canada, Analytical Studies Branch Research Paper No. 80.

MORISSETTE, R. and C. BÉRUBÉ (1996). "Longitudinal Aspects of Earnings Inequality in Canada." Ottawa: Statistics Canada, Analytical Studies Branch Research Paper No. 94.

MORISSETTE, R., J. MYLES, and G. PICOT (1994). "Earnings Inequality and the Distribution of Working Time in Canada." *Canadian Business Economics*. Vol. 2, 3-16.

OECD (1996). "Growing into Work: Youth and the Labour Market Over the 1980s and the 1990s." *Employment Outlook*. Paris: Organization for Economic Cooperation and Development.

WOOD, A. (1994). *North-South Trade, Employment and Inequality*. Oxford: Oxford University Press.



## Chapter 4

# Intergenerational Income Mobility in Canada

NICOLE M. FORTIN AND SOPHIE LEFEBVRE

---

Will the children of high income families achieve equally high incomes? Will the children of low income families become low income adults? These important questions deal with intergenerational income mobility, that is with the transmission of economic status between generations. Our objectives in this chapter are to determine the degree of intergenerational income mobility in Canada during the mid-1980s and 1990s and to investigate whether it has changed over time. In an era of increasing income inequality within a generation, it is important to understand whether equality of opportunity is preserved, or whether increasing polarization in labour market outcomes will be further exacerbated in the next generation. Equality of opportunity makes it possible for citizens to exploit their personal abilities and resources without consideration of family background. The higher the transmission of economic status between two generations, the lower the equality of opportunity. The degree of economic transmission between two generations, in turn, affects income inequality within a generation. For example, Becker and Tomes (1986) have shown that income mobility is affected by parental investments in their offspring, which then affects income inequality. The degree of transmission between two generations tells us how a society deals with the issues of income inequality and equality of opportunity; it can be seen as a socioeconomic barometer of a society. It is also of great importance to many public policy concerns, such as the public financing of schooling.

Not surprisingly, many recent studies of intergenerational equity have concentrated on the two countries where within-generation income inequality has increased most dramatically: the United States (Altonji and Dunn 1991, Solon 1992, Zimmerman 1992, Peters 1992) and the United Kingdom (Dearden, Machin and Reed 1997). Another reason for the focus on these countries has to do with the availability of

longitudinal data tracking individuals for sufficiently long periods. Data limitations have prevented similar research in Canada. However, Corak and Heisz (1995, 1998) have recently overcome this problem by using income tax information on close to 450,000 father-son pairs. In this chapter, we use a different route to examine the same issue by combining publicly available data on average occupational income from the decennial Canadian Censuses of 1951 through 1991 (including the 1986 Census) with data from the General Social Survey of 1986 and 1994. In spite of the very different data used, our results are similar to those of Corak and Heisz (1995, 1998), and indicate that there is a greater degree of intergenerational income mobility in Canada than in the U.S. or the U.K. We also find a higher degree of transmission of economic status between fathers and daughters than between fathers and sons. Finally, our estimates show that the rate of intergenerational income mobility is higher among more recent cohorts than among older cohorts.

### 1. Data Description

The choice of an appropriate data set is an especially crucial methodological issue in studies dealing with intergenerational income mobility. The need for information on the status of individuals in two successive generations at approximately the same points in the life cycle is a particularly stringent requirement. The General Social Surveys (GSS) conducted by Statistics Canada do, however, provide a rich set of information of this kind and have permitted a host of sociological studies dealing with occupational or educational mobility between generations. In particular, the respondents to the 1986 and 1994 GSSs were asked detailed questions about their parents. Respondents provided information on the employment status, the education level, the

occupation and the industry of their fathers and mothers when they (the respondents) were 15 years of age. In addition, the GSS provides respondent information on gender, age, years of education, occupation and before-tax income from wages, salaries and self-employment. However, the absence of information on parental income is an important limitation for our purposes. We therefore develop a strategy to obtain a measure of incomes for the fathers using the information available on them. The resulting estimation strategy is equivalent to an instrumentation of fathers' incomes with fathers' occupations and implies problems of its own, which we discuss in detail in Section 2.

A related important issue in the estimation of intergenerational mobility is the determination of parental permanent income. Solon (1992) and Zimmerman (1992) have shown that the use of income in a single year can seriously overstate the degree of income intergenerational income mobility, especially in combination with the use of an overly homogeneous sample. We link occupational information from the GSS to income information from the Census to obtain average income by occupation. This assumes that occupation is a good instrument to estimate the parent's permanent income. In the 1986 GSS the occupation of the parents is given only in terms of the Pineo-Porter-McRoberts Socioeconomic Classification of Occupations (Pineo, Porter and McRoberts 1977). This system reclassifies the Canadian Standard Classification of Occupations (4-digit codes) of 1971 and 1981 into 15 categories, ordered by skill levels. These range from farm labourers, unskilled manuals, and unskilled clerical sales and services; to semi-skilled manuals, semi-skilled clerical sales and services, farmers; to skilled crafts and trades, skilled clerical sales and services, foremen, supervisors, middle managers, technicians, semi-professionals; and finally to high-level managers and professionals. The ordering by skill levels represents the main advantage of the Pineo-Porter-McRoberts reclassification over the standard 2-digit classification of the 1980 occupation codes provided by Statistics Canada. The latter was not designed to measure economic status and sometimes aggregates occupations by industry rather than by skill levels. In fact the new 1990 occupation codes have been completely redesigned to correct this problem. The Pineo-Porter-McRoberts system is relatively well suited to our needs since it can be applied to the earlier classifications systems (Pineo, 1985). Nonetheless, this reclassification system presents some

problems. The disadvantage of an ordering by skill levels is that the resulting classes may represent a job ladder rather than lifetime occupational choices. Clearly, an improvement in our estimation strategy would be to use the detailed occupation codes and obtain average occupational income by years of education. However, such a strategy is not feasible from publicly available data.

Since detailed 4-digit occupation codes are not available in the Census public release files, we use the average employment income by detailed occupation from the "Tables of Average Employment Income by Detailed Occupation." These tables offer the average income of all workers 15 years old and older, by gender for the Census years 1951 to 1991. For every Census table, we re-classify every 4-digit occupation by the Pineo-Porter-McRoberts classification and compute the weighted average employment income for the 15 occupational categories. The estimated average occupational income is then the weighted average occupational income for 1950, 1960, 1970, 1980, 1985 and 1990. Fathers' occupations are observed when the respondents were 15 years of age: from 1944 to 1982 for the 1986 sample, and from 1952 to 1990 for the 1994 sample. We linearly interpolate between every two Census periods to obtain the intermediate incomes. The estimated average occupational income computed in constant 1993 dollars are shown in Table 4.1. The mean income of the 15 occupational groups increased from \$15,434 in 1950 to \$34,979 in 1980, then decreased to \$33,245 in 1985, and went back up to \$34,251 in 1990. Alongside this rising trend in mean income is an increase in income inequality, the gap between the highest and lowest income widening substantially over the period. In 1950, the average income of unskilled manual workers was about half of that of high-level managers, while in 1990 it was less than a third.

Our measure of occupational income averages the income of workers at different points in their life-cycle, and therefore provides a better measure of economic status than one observation at a point in time. Income observed at any one year will contain both a permanent and a transitory element. Solon (1992) and Zimmerman (1992) average up to five consecutive years of father's income data in order to minimize the problems of biases arising from the presence of transitory components. (An ideal measure of permanent income would be based upon a series of observations over an individual's entire

Table 4.1  
**Estimated Average Occupational Income of Men in 1993 Dollars**

Pineo-Porter-McRoberts						
Classification of Occupations	1950	1960	1970	1980	1985	1990
(1993 Dollars)						
Professionals	20,888	32,457	43,547	54,153	53,928	54,872
High-Level Management	23,223	36,734	81,227	71,378	69,702	68,871
Semi-Professionals	18,293	27,100	31,518	35,753	34,628	36,632
Technicians	16,122	24,178	29,401	35,190	35,361	36,207
Middle Management	15,793	18,194	44,405	46,226	42,607	45,425
Supervisors	17,009	25,696	34,208	36,398	34,894	36,192
Foremen	19,851	26,033	37,596	42,217	39,335	40,763
Skilled Clerical Sales and Services	16,713	23,087	31,851	37,661	35,856	36,380
Skilled Crafts and Trades	15,381	20,852	27,941	32,205	30,835	32,155
Farmers	11,714	17,258	15,568	25,589	19,772	20,190
Semi-Skilled Clerical Sales and Services	14,653	16,581	21,048	22,478	21,209	22,052
Semi-Skilled Manuals	13,039	18,326	23,859	27,058	25,886	26,445
Unskilled Clerical Sales and Services	11,701	17,671	20,201	23,483	21,736	21,976
Unskilled Manuals	11,549	14,197	18,736	22,143	21,093	22,030
Farm Labourers	5,576	7,437	9,637	12,744	11,825	13,569

**Source:** Calculations by authors from Statistics Canada data, various censuses.

life.) Our average occupational income measures may be contaminated by transitory components only insofar as these measures are linked to a transitory occupation. The issue of whether the father's occupation, as reported by the sons, is likely to have been a permanent or a transitory occupation, may depend on the age of the father. The older the father the more likely the occupation is permanent. A related issue is whether our measures of income are contaminated by life-cycle effects. Is the average income of high-level managers higher because of economic status, because high-level managers are further along their life-cycle paths, or because their life-cycle path is steeper? We cannot assess age differences by occupation for fathers, but the average age of sons from the 1986 and 1994 GSS does vary somewhat by the Pineo-Porter-McRoberts occupations. High-level managers and foremen are on average four years older than middle managers and skilled craft workers. The average age differences between the other occupations are smaller. One way to address the issue of differences in life-cycle paths by occupation would be to use different life-cycle corrections for each occupation. While this strategy is feasible for children, it is not for fathers and thus simply reduces the correlation between father and child incomes. An alternative strategy is to compare fathers and children at the same point in

their life-cycle paths, assuming that these paths have not changed significantly over time. We do not know the age of the father, but if we assume 25 to 35 year differences between fathers and sons, this places the fathers of 40 to 50 year old children at the same stage in the life-cycle as their children. Thus estimates that focus on this age group are less likely to be contaminated by problems associated with transitory occupations and life-cycle effects.

Our samples from the GSS consist of men and women aged 17 to 59 years, whose main activity in the 12 months prior to the survey was working at a job or being self-employed. The main characteristics of the samples used in the estimation are presented in Table 4.2. We do not study intergenerational income mobility between mother-son and mother-daughter pairs mainly because we have information on the mother's occupation only for a fairly small sample. Our sample sizes are 3,400 father-son pairs and 2,474 father-daughter pairs from the 1986 GSS, and 2,459 father-son and 2,308 father-daughter pairs from 1994 GSS. The men in our sample are on average 35.5 years of age in 1986 and 37.4 in 1994, while the women average 34.2 years of age in 1986 and 36.5 in 1994. Overall the women are more educated than the men. In addition, fathers are less educated than their



Table 4.2  
Descriptive Statistics

	Sons		Daughters	
	1986	1994	1986	1994
Age	35.5 (10.12)	37.4 (10.76)	34.2 (9.98)	36.5 (10.70)
Years of Education	12.9 (3.08)	13.85 (2.98)	13.32 (2.62)	14.09 (2.57)
Weekly Employment Income	\$776.83 (456.86)	\$702.94 (383.50)	\$521.83 (365.79)	\$474.48 (284.59)
Occupational Weekly Income	\$641.35 (241.83)	\$680.80 (245.50)	\$362.23 (143.30)	\$398.58 (151.42)
Father's Education	9.2 (4.66)	10.5 (5.07)	9.3 (4.44)	10.6 (4.97)
Father's Occupational Weekly Income	\$493.08 (223.61)	\$559.83 (250.45)	\$512.06 (228.51)	\$560.71 (237.26)
Sample Size	3,400	2,459	2,474	2,308

**Notes:** All incomes are in constant 1993 dollars. The numbers in parentheses are standard deviations.

**Source:** Calculations by Authors from General Social Survey, Statistics Canada.

children. The estimated occupational weekly income for sons is lower than the reported average income in the 1986 GSS; this discrepancy is much less important in the 1994 GSS. It is difficult to know whether this reflects life-cycle or cyclical effects.<sup>1</sup>

Our sample size compares favourably to recent U.S. studies, which have been based on as few as 348 to a maximum of 876 observations (Altonji and Dunn 1991, Solon 1992, Zimmerman 1992). For the U.K., Atkinson (1981) uses a sample taken from a study of men in York in 1950 and traces the sons of these individuals during the late 1970s. His final non-random sample covers only 307 father-son pairs. Another advantage of our data is the information it contains on individuals in many more cohorts. Because we have two observations on the same cohorts, we will also be able to perform some cohort analysis to investigate whether intergenerational mobility has changed over time. In contrast, Dearden, Machin and Reed (1997) use the National Child Development Survey, an ongoing survey of all persons born in the U.K.

between March 3rd and 9th of 1958. They have access to child incomes only at age 23 and 33 and have only a single measure of father incomes when the children were 16 years old. In Canada, Corak and Heisz (1995, 1998) focus on a cohort of 27 to 31 year-olds using income drawn from tax records and multi-year averages for the father's income.

In our analysis we follow the thrust of the existing literature and appeal to two complementary analytical frameworks: the log-linear regression model and the quartile transition matrix. These methods have been applied by many authors and make comparisons possible. The log-linear regression model posits a simple linear relationship between the child's and the father's log income and may be interpreted as examining the average degree of transmission of economic status. The quartile transition matrix attempts to distinguish different degrees of transmission by income quartile. It allows us to assess whether there is more or less mobility at the bottom than at the top of the income distribution.

## 2. Regression Models

In the log-linear regression model, the logarithm of the permanent income of a child belonging to family  $i$  ( $y_i^{\text{child}}$ ) is considered to be a linear function of the log of the permanent income of the father ( $y_i^{\text{parent}}$ ) as shown by equation (1):

$$y_i^{\text{child}} = \alpha + \beta y_i^{\text{parent}} + \varepsilon_i \quad (1)$$

where  $\varepsilon_i$  is an error term usually assumed to be distributed as  $N(0, \sigma^2)$ . This equation should be viewed as a reduced-form equation of a complex process of economic transmission, where the coefficient  $\beta$  indicates the degree of mobility between the two generations. There are two extreme cases. First if  $\beta=0$ , there is complete mobility, in other words complete regression to the mean. The income of the child shows no correlation with the father's income. At the other extreme, if  $\beta=1$ , there is complete immobility. The distribution of income in the father's generation is completely preserved in the child's generation. For values of  $\beta$  between 0 and 1, there is regression towards the mean, but the rate depends on the value of  $\beta$ . The lower  $\beta$ , the lower the chances the child will inherit the economic status of his father, and the higher the degree of mobility.

Methodological problems arise because we do not observe the child's or the father's permanent income, and have to use proxies for it. As mentioned earlier, Solon (1992) and Zimmerman (1992) have pointed out that an error-in-variables problem may arise from the use of proxies that include transitory components. While these transitory components will generally be uncorrelated with permanent status, they will lead to an overestimation of the variance of the father's income. This results in an underestimation of the true intergenerational transmission coefficient (which is equal to the covariance between the child's and the father's income divided by the variance of the father's income). We do not face problems arising from an overstated variance of the father's income. In fact, our measure of father's income may understate the true population variance which, in itself, would lead to estimates of  $\beta$  that are upwardly biased. However, this smaller dispersion of father's income may also lead to smaller covariance between the child-parent incomes. Therefore, it is difficult to assess the direction of the overall bias in our models.

We use the detrended average occupational employment income of fathers during the years the child was 15 years old. This measure corresponds to the instrumentation of the father's

income with the father's occupation, and may be a subject of concern. As explained in Solon (1992), if the father's occupation is part of a structural model of the son's income, the corresponding instrumental variable estimate of  $\beta$  may be biased. If the father's occupation does not influence the son's income beyond its indirect effect through the father's income the estimate will be consistent. However, it will be upwards or downwards inconsistent if the father's occupation influences (positively or negatively) the son's status beyond its effect through income levels. We will thus perform an over-identification test to verify that our estimates are consistent. For children, we have information on employment income in 1985 from the 1986 GSS and in 1993 from the 1994 GSS. This single measure of income may deviate from permanent status because of age effects that we attempt to eliminate by using time-varying control factors that may affect current income (specifically age and age squared). We will also provide alternative estimates using the same instrumented measure of income for sons as we do for fathers. While we are aware of the potential problems with our measure of permanent income, we believe that these problems may not have evolved differently across age groups or over time and thus that our age groups and cohort analyses will be informative.

Two different approaches are used to estimate  $\beta$ . The first—which we refer to as the Instrumental Variables (IV) approach—assumes that occupation is a valid instrument to estimate the permanent income of the father. If this is the case then the father's income can be expressed as:

$$y_{it}^{\text{parent}} = \gamma_{kt} \sum \text{Occ}_{kt}^{\text{parent}} + v_{it}^{\text{parent}} \quad (2)$$

where  $y_{it}^{\text{parent}}$  is the occupational income of the father in year  $t$ ,  $\text{Occ}_{kt}$  are a set of dummy variables indicating occupation  $k$  ( $k=2$  to  $16$ ) in year  $t$ ,  $\gamma_{kt}$  is the average income of occupation  $k$  in year  $t$ , and  $v_{it}$  is an error term. We recover a residual measure of the permanent status of the parent,  $\hat{y}_{it}^{\text{parent}}$ , by removing the time varying components from the occupational income,

$$\hat{y}_{it}^{\text{parent}} = \hat{\gamma}_{kt} \sum \text{Occ}_{kt}^{\text{parent}} - \hat{\delta} x_{it}^{\text{parent}} \quad (3)$$

where  $\hat{\gamma}_{kt}$  is the estimated average income for occupation  $k$  in year  $t$ , where the time varying factors  $x_{it}^{\text{parent}}$  are dummies linked to the year of observation of the father's occupation.

Similarly, we do not observe the child's permanent income  $y_i^{\text{child}}$ , but rather  $y_{it}^{\text{child}}$ , that is employment income at a single point in time. We assume that employment income at time  $t$  is a

function of the permanent income  $y_i^{\text{child}}$  and also of  $x_{it}^{\text{child}}$ , a vector of observed time-varying factors which affect the current status of the adult "child" and of  $w_{it}^{\text{child}}$ , a transitory error term:

$$y_{it}^{\text{child}} = y_i^{\text{child}} + \delta x_{it}^{\text{child}} + w_{it}^{\text{child}}. \quad (4)$$

To obtain a measure of permanent income, we regress  $y_{it}^{\text{child}}$  on the time-varying factors  $x_{it}^{\text{child}}$  (age, age<sup>2</sup>) and use the residual as an estimate of the child's permanent income:

$$\hat{y}_{it}^{\text{child}} = y_{it}^{\text{child}} - \hat{\delta} x_{it}^{\text{child}} = y_i^{\text{child}} + w_{it}^{\text{child}} \quad (5)$$

When we run the following regression, we have thus removed the time-varying factors that we can control for,

$$\hat{y}_{it}^{\text{child}} = \alpha + \beta \hat{y}_{it}^{\text{parent}} + \varepsilon_i \quad (6)$$

so that

$$y_i^{\text{child}} = \alpha + \beta (\hat{y}_{kt} \sum \text{Occ}_{kt}^{\text{parent}} - \hat{\delta} x_{it}^{\text{parent}}) + \eta_i^{\text{child}} \quad (7)$$

where  $\eta_i^{\text{child}} = \varepsilon_i + w_{it}^{\text{child}}$ . The OLS estimator of the coefficient  $\beta$  will be consistent if the occupation dummies,  $\text{Occ}_{kt}^{\text{parent}}$ , and the trend variables,  $x_{it}^{\text{parent}}$ , are uncorrelated with  $\eta_i^{\text{child}}$ .

The second approach—referred to as the Occupational Income (OccInc) approach—assumes that the transmission processes between permanent income and occupational income is the same, that is, the essential features of economic status are transmitted through occupational status. This implies that the correlation between father and child permanent incomes will be the same as between father and child occupational income ( $\hat{y}_{oi}^{\text{parent}}$  and  $\hat{y}_{oi}^{\text{child}}$ ):

$$\text{corr}(y_i^{\text{child}}, y_i^{\text{parent}}) = \text{corr}(\hat{y}_{oi}^{\text{child}}, \hat{y}_{oi}^{\text{parent}}). \quad (8)$$

If our assumption is correct, we can estimate the following regression,

$$\hat{y}_{oi}^{\text{child}} = \alpha + \beta \hat{y}_{oi}^{\text{parent}} + e_i, \quad (9)$$

where

$$\hat{y}_{oi}^{\text{child}} = \hat{y}_{kt} \sum \text{Occ}_{kt}^{\text{child}} - \hat{\delta} x_{it}^{\text{child}}$$

and

$$\hat{y}_{oi}^{\text{parent}} = \hat{y}_{kt} \sum \text{Occ}_{kt}^{\text{parent}} - \hat{\delta} x_{it}^{\text{parent}}, \text{ and where}$$

$\hat{y}_{kt}$  is the estimated income of occupation  $k$  in year  $t$  and where the time-varying controls are the same as in (3). If the assumption about the similarity of the transmission of occupational income and permanent income is valid, and if the occupational dummies,  $\text{Occ}_{kt}^{\text{child}}$ , and trend variables are uncorrelated with  $e_i$ , the coefficient estimated through equation (9) will be a consistent estimate of the true coefficient of transmission of economic status.

Table 4.3 offers the results from the log-linear model for fathers and sons, and fathers and daughters; separately for the two surveys and for the joint sample. We also conduct the analysis separately for three different age groups. This allows us to compare our estimates to other studies that focus on particular age groups. The estimates of the coefficient of intergenerational mobility (what we refer to as  $\beta$ ) using the IV approach are given in Panel A. For the 1986 GSS, we estimate  $\beta$  to be 0.191 for father-son pairs, and 0.228 for father-daughter pairs. These estimates are essentially the same when the 1994 data are used: 0.217 and 0.226<sup>2</sup>. Over-identification tests (Newey, 1985) are performed to find out if there remains some correlation between the error term  $\eta_i$  and the dummy variables  $\text{Occ}_{kt}$ . For the 1994 sample of sons and daughters, the regression of the residuals from equation (7) on the variables  $\text{Occ}_{kt}$  passes the F test of non-significance. We conclude that our instrumentation strategy seems valid for the 1994 sample. On the other hand, the 1986 sample for sons and daughters almost passes the F test at 10%, but the null hypothesis is rejected; the two terms are correlated but the correlation is not strong. The fact that the estimates from 1986 and 1994 are not significantly different further indicates that the biases are quite small.

The results from the regressions that split the data into three age groups are presented in Panel B of Table 4.3. Intergenerational mobility diminishes with age for sons in the 1986 and 1994 samples. The estimates of  $\beta$  for the father-son pairs from the 1986 GSS are 0.105 when the sons are between 17 and 29 years old, 0.201 when they are between 30 and 39 years, and finally 0.297 when they are 40 to 59 years old. The same pattern is found for the father-daughter pairs of the 1994 sample, but with 1986 data the group showing the least mobility are 30 to 39 years of age. Interestingly, this group represents approximately the same cohort of women aged 40 to 59 in 1994. This raises the possibility of cohort effects. The higher mobility of the older group in 1986 may reflect a change in the work patterns of women, or may simply be attributed to smaller sample sizes. The sons' and daughters' income are adjusted for life-cycle effects by using the residuals of the regression of their income on their age and age square. It is possible that this adjustment does not fully capture the life-cycle effects. Alternatively, intergenerational mobility could have been different for different cohorts. The other interesting implication of these results for studies concentrating on children in their early



Table 4.3  
Estimates of the Coefficient of Intergenerational Mobility

	Fathers and Sons		Fathers and Daughters	
	1986	1994	1986	1994
<b>A. Instrumental Variables Method</b>				
	0.191 (0.029) [3,400]	0.217 (0.032) [2,459]	0.228 (0.041) [2,474]	0.226 (0.040) [2,308]
<b>B. Instrumental Variables Method by Selected Age Groups</b>				
17 to 29 Years	0.105 (0.052) [1,103]	0.048 (0.065) [651]	0.143 (0.062) [959]	0.145 (0.070) [681]
30 to 39 Years	0.201 (0.043) [1,220]	0.218 (0.051) [811]	0.324 (0.063) [842]	0.218 (0.064) [733]
40 to 59 Years	0.297 (0.062) [1,077]	0.351 (0.055) [997]	0.208 (0.104) [673]	0.309 (0.076) [894]
<b>C. Occupational Income Method</b>				
	0.185 (0.017) [4,013]	0.202 (0.021) [2,335]	0.155 (0.020) [3,027]	0.139 (0.024) [2,153]
<b>D. Joint Sample, Instrumental Variables Method</b>				
	0.208 (0.022) [5,859]		0.228 (0.029) [4,782]	

**Note:** ( ) indicates standard errors, [ ] indicates sample size.

30s is that this choice for father-son pairs is representative of the whole sample.

The results from the occupational income approach are offered in Panel C of Table 4.3. To repeat, this approach assumes that the transmission process between generations is the same for permanent incomes as for occupational incomes. For the sons, the estimates of  $\beta$  for the 1986 sample and 1994 sample are respectively 0.185 and 0.202. These estimates are not significantly different from those based on the IV approach. However, they are significantly lower for daughters: 0.155 for 1986 and 0.139 for 1994 (versus 0.228 and 0.226)<sup>3</sup>. The occupational income results are in line with other studies that have found somewhat smaller coefficients with a prediction approach (Dearden, Machin and

Reed 1997). They also indicate that our estimates for father-son pairs are more robust than our result for daughter-father pairs.

Another way to split our samples is by birth cohort (the approximate year of birth). An analysis of this sort reveals whether the degree of intergenerational income mobility has changed over time. Table 4.4 presents results for three cohorts. Individuals aged 50 to 59 in 1986 were removed from the joint sample in order to have two observations over time for each cohort. The first cohort consists of individuals born between 1935 and 1945 (who were in their forties in 1986 and in their fifties in 1994); the second consists of individuals born between 1946 and 1954 (those in their thirties in 1986 and in their forties in 1994); and the third of individuals born between 1955

Table 4.4  
Estimates of the Coefficient of Intergenerational Income Mobility  
Using Cohort Analysis

	Fathers and Sons	Fathers and Daughters
Cohort Born Between 1935 and 1945	0.316 (0.065) [1,061]	0.265 (0.099) [756]
Cohort Born Between 1946 and 1954	0.246 (0.035) [1,827]	0.323 (0.050) [1,411]
Cohort Born Between 1955 and 1969	0.157 (0.034) [2,248]	0.191 (0.041) [2,021]

Note: ( ) indicates standard errors, [ ] indicates sample size.

and 1969 (in their twenties in 1986 and their thirties in 1994). The findings in Table 4.4 are based on the IV approach.

There are significant differences between the three cohorts. For the father-son pairs, we find an estimate of 0.316 for the first cohort, 0.246 for the second cohort and 0.157 for the third. Because we have only two observations over time, there remains substantial age differences between the cohorts, and for this reason our results showing an increasing mobility over time for sons should be interpreted with caution. We observe a different pattern for the father-daughter pairs. The estimates are 0.265 for the first cohort, 0.323 for the second and 0.191 for the third. The second cohort is the one showing the highest degree of transmission of economic status. The differences in participation rates of women across these cohorts may be at the origin of these different results for the father-daughter pairs. This second cohort represents the first generation of women to enter the labour market in great numbers. The degree of transmission of economic status between two generations seem to differ across cohorts, but it is not clear whether this is due to age differences, differences in the transmission process (for example, through universal access to higher education), or to an increase in the dispersion of income for younger cohorts. For example, since the coefficient of transmission of economic status is equal to the coefficient of correlation between two generations times the ratio of the standard deviations of fathers and children's incomes, a relative increase of 20% in the standard deviation of

children's income would lead to an increase of 0.03 in  $\beta$  if the coefficient of correlation was 0.3.

In summary, our main estimates of the degree of intergenerational income mobility are in the range of 0.2, the consensus value that was found in the earlier studies using simple least squares regression models. These earlier estimates were criticized as being downwardly biased because the observed father's income was thought to include transitory components. While the presence of transitory components is less likely to be a problem with our estimation strategy, the fact that the variance of the father's occupational income may understate the true variance of the father's permanent income may be problematic. It is thus interesting to compare our results with findings of other recent studies conducted in the U.S., the U.K., and especially Canada. Some results from this literature are presented in Table 4.5. We find that our estimates of the degree of intergenerational income mobility (ranging from 0.19 to 0.21) between sons and fathers are very similar to those of the other Canadian study. Corak and Heisz (1995) obtain an estimate of 0.191 for the father-son pairs using a five years average of fathers' income with Least Squares regression. Their other estimates are even lower. A more conservative interpretation of our results would focus on the forty to fifty year age group, and place our estimate of income mobility in the low 0.3 range. Conversely, the latest studies done in the U.S., by Solon (1992) and Zimmerman (1992), show estimates of  $\beta$  between 0.413 and 0.538 using five and four years average of fathers' incomes with Least

Table 4.5  
**Estimates of Intergenerational Income Mobility from other Studies**

Author	Country and Data Set	Estimation Method	Estimate of $\beta$ for Father-Son Pairs
Corak and Heisz (1995)	Canada, Tax Record Data (1992) 450,000 father-son pairs sons aged 28 to 31	OLS with single year of father's income	TT: 0.121-0.136 AE: 0.115-0.143
		OLS with five years average of father's income	TT: 0.191 AE: 0.172
Altonji and Dunn (1991)	United States, NLSY (1965-1967) 678-739 father-son pairs sons aged 29 to 39	OLS with time averaging of father's income and age controls	AE: 0.180 HW: 0.263
		IV with later years income as instruments and full set of controls	AE: 0.218 HW: 0.282
Solon (1992)	United States, PSID (1984) 348 father-son pairs sons aged 25 to 33	OLS with single year of father's income	AE: 0.386 HW: 0.294
		OLS with five years average of father's income	AE: 0.413
		IV with father's years of education	AE: 0.526 HW: 0.449
Zimmerman (1992)	United States, NLSY(1981) 876 father-son pairs sons aged 29 to 39	OLS with four years average of father's income	AE: 0.538 HW: 0.391
		IV with Duncan index for father's status	AE: 0.417 HW: 0.485
		IV with forward quasi-difference instrument	AE: 0.36 HW: 0.379
Atkinson (1981)	United Kingdom, Rowntree Survey (1975-1978) 288-307 father-son pairs sons aged 25 up	OLS	WE: 0.358 HW: 0.428
		OLS with life-cycle adjustments	HW: 0.415
Dearden, Machin and Reed (1997)	United Kingdom, NCDS(1991)  1,665 father-son pairs, 747 father-daughter pairs children aged 23 and 33	OLS with single year of father's income	WE: 0.216 (sons) WE: 0.352 (daughters)
		IV with father's education and social class	WE: 0.581 (sons) WE: 0.669 (daughters)
		Predicted wages with father's education and social class	WE: 0.425 (sons) WE: 0.469 (daughters)

**Note:** PSID - Panel Study of Income Dynamics; NLSY - National Survey Study of Youth; NCDS - National Child Development Study; TT - Total Income; AE - Annual Earnings; WE - Weekly Earnings; HW - Hourly Wage.



Squares regressions. Similarly, the estimates for U.K. males found by Atkinson (1981) and Dearden, Machin and Reed (1997) are substantially higher than those found for Canada by Corak and Heisz (1995, 1998), and by us for similar age groups. Of course, there remain important differences in methodology. However, even when we compare the admittedly flawed Least Squares estimates presented in Solon (1992), Zimmerman (1992), and Dearden, Machin and Reed (1997) (and reported in Table 4.5) to the Canadian estimates (including our findings) these are still lower than those found in the U.S. or in the U.K. We thus conclude that there is more intergenerational income mobility in Canada than the U.S. and the U.K. It is interesting to note that Björklund and Jäntti (1997) in a meta-study reach a similar conclusion: the U.S. and the U.K. have the lowest mobility among seven other developed countries. We will now attempt to corroborate this conclusion using another technique to estimate the degree of transmission of economic status between generations.

### 3. The Transition Matrix Method

The quantile transition matrix method allows us to analyze movement between income quantiles across generations. Since it is a widely used method, it is possible to make comparisons with other studies. The major advantage of quantile transition matrices over the log-linear regression model is that it permits an assessment of whether there is more or less mobility at the bottom or at the top of the income distribution. If one is pre-occupied by the existence of an "underclass," the degree of mobility in the lowest quantiles of the income distribution are more relevant than the average degree of intergenerational mobility. One should note, however, that because our study is limited to earnings mobility, it does not address issues related to the existence of a "poverty trap." There are generally no earners in Canadian families ranked in the lowest decile of family income-to-needs ratios (Fortin and Lemieux, 1997). In addition one must keep in mind that quantile transition matrices provide only a very crude way of looking at potential non-linearities in the transmission process. For example, Corak and Heisz (1998) examine this issue in much more detail using non-parametric regression methods.

The methodology of transition matrices is the following. The fathers and the children are each ranked according to income, and divided (in our case) into four groups of equal size. Individuals in the first group have the lowest income and

those in the fourth group the highest. A matrix is then constructed where each element, referred to as  $a_{ij}$ , represents the probability that a child will be in quantile  $j$  if his or her father was in quantile  $i$ . This matrix exhibits a bi-stochastic property. If  $a_{ij}$  is the proportion of children of fathers in quantile  $i$  who enter quantile  $j$ , then  $\sum_j a_{ij} = 1$  and also  $\sum_i a_{ij} = 1$ . The two extreme cases of income mobility can be represented using this approach: complete mobility occurs when each element of the matrix equals 0.25; complete immobility when the diagonal elements are equal to 1 (and all the others equal 0).

The estimates of the transition matrices for 1986 and 1994 (for sons and daughters) are given in Table 4.6. These are computed using the age-corrected residual income for the sons and daughters and the detrended average occupational income for fathers. Generally, the results display a high rate of mobility. Even in the top quartile, where there is usually less mobility, the rates of transmission of economic status are lower than those found in other studies. For the 1986 and 1994 samples, the probabilities that sons whose father were in the top quartile of the income distribution stayed at the top are 0.32 and 0.33. These correspond to the estimates in Corak and Heisz (1995), but are much lower than the 0.40 for the U.S. reported by Peters (1992) or the 0.39 for the U.K. reported by Dearden, Machin and Reed (1995). The same findings apply to the daughter samples, with estimates of 0.34 for 1986 and 0.33 for 1994. The other notable finding, by comparison with other studies, is that the mobility at the bottom of the income distribution is quite substantial. In fact, the 1994 results tell us that sons whose fathers were in the bottom quartile of the income distribution are more likely to be in the second or third quartile than in the bottom one. Our estimated probability that sons whose fathers were in the bottom quartile remain in that quartile from 0.260 to 0.285 and is, somewhat lower than the Peters and Dearden et al. findings for the U.S. (0.42) or the U.K. (0.315). While our estimates are generally not statistically different from 0.25, Corak and Heisz (1995) found a larger estimate (0.353) that is statistically different from the situation of perfect mobility. Corak and Heisz (1998), however, show that finer disaggregation (the use of deciles or percentiles) pushes any stickiness in the transmission process toward the very low and very high income classes. The general pattern of income mobility is thus relatively close to the situation of perfect mobility, with the exception of moves from either the very top or the very bottom of the income distribution.

Table 4.6  
**Quartile Transition Matrices**

**A. Fathers – Sons, 1986**

		Sons			
		Bottom	2 <sup>nd</sup>	3 <sup>rd</sup>	Top
Fathers	Bottom	0.285 (0.016)	0.279 (0.015)	0.234 (0.015)	0.224 (0.014)
	2 <sup>nd</sup>	0.293 (0.016)	0.239 (0.015)	0.212 (0.014)	0.216 (0.014)
	3 <sup>rd</sup>	0.232 (0.014)	0.258 (0.015)	0.256 (0.015)	0.252 (0.015)
	Top	0.184 (0.013)	0.222 (0.014)	0.296 (0.016)	0.322 (0.016)
Immobility Index = 0.276					

**B. Father – Sons, 1994**

		Sons			
		Bottom	2 <sup>nd</sup>	3 <sup>rd</sup>	Top
Fathers	Bottom	0.260 (0.018)	0.277 (0.018)	0.264 (0.018)	0.190 (0.016)
	2 <sup>nd</sup>	0.265 (0.018)	0.251 (0.018)	0.234 (0.017)	0.221 (0.017)
	3 <sup>rd</sup>	0.254 (0.017)	0.213 (0.016)	0.278 (0.017)	0.303 (0.018)
	Top	0.187 (0.015)	0.241 (0.017)	0.231 (0.018)	0.332 (0.019)
Immobility Index = 0.280					

**C. Fathers – Daughters, 1986**

		Daughters			
		Bottom	2 <sup>nd</sup>	3 <sup>rd</sup>	Top
Fathers	Bottom	0.265 (0.018)	0.272 (0.018)	0.278 (0.018)	0.196 (0.016)
	2 <sup>nd</sup>	0.276 (0.018)	0.248 (0.018)	0.231 (0.017)	0.228 (0.017)
	3 <sup>rd</sup>	0.28 (0.018)	0.23 (0.017)	0.232 (0.017)	0.257 (0.017)
	Top	0.171 (0.015)	0.233 (0.017)	0.276 (0.017)	0.338 (0.019)
Immobility Index = 0.271					

Table 4.6 – Concluded  
Quartile Transition Matrices

D. Father –Daughters, 1994		Daughters			
		Bottom	2 <sup>nd</sup>	3 <sup>rd</sup>	Top
Fathers	Bottom	0.256 (0.018)	0.274 (0.019)	0.244 (0.018)	0.22 (0.017)
	2 <sup>nd</sup>	0.281 (0.019)	0.27 (0.018)	0.239 (0.018)	0.211 (0.017)
	3 <sup>rd</sup>	0.25 (0.018)	0.229 (0.018)	0.246 (0.018)	0.281 (0.019)
	Top	0.187 (0.016)	0.236 (0.017)	0.25 (0.018)	0.326 (0.019)
Immobility Index = 0.275					

**Note:** Child incomes are the age-corrected residual incomes, and father incomes are the detrended average occupational incomes. ( ) represents the standard errors due to sampling variability and should be interpreted as a lower bound to the true standard errors.

The ranking of different quartile matrices can be useful to compare the degree of mobility found in the various studies. An Immobility Index can be computed as the ratio of the sum of the diagonal elements to the sum of all elements in the matrix. We find an immobility index of 0.28 for the father-son pairs and 0.27 for the father-daughters pairs, as shown in Table 4.6. These estimates are in the range of those of Corak and Heisz (1995), who obtained an index value of 0.306 for Canada. As the authors report, these values are substantially lower than those found by others for the United Kingdom (0.3675) and the U.S. (0.350). These findings support the results of our log-linear model, and suggest that if intergenerational income mobility is higher in Canada than in the U.S. or in the U.K., this would be mainly because of more mobility both at the bottom and at the top of the income distribution.

4. Conclusion

In this chapter we combine publicly available data on average occupational income from the Canadian Censuses of 1951 to 1991 with data from the General Social Surveys of 1986 and 1994 to obtain estimates of intergenerational income mobility. We use an instrumental variables approach to the estimation of the standard log-linear models, as well as some cohort analyses of these data. Our estimates of the log-linear model are similar to the ones found by Corak and Heisz (1995, 1998), the only other Canadian

studies done to date. These results suggest that intergenerational mobility is higher in Canada than in the U.S. or the U.K., where recent research has shown that previous estimates overstated the degree of mobility. Because of our somewhat larger sample sizes, we are also able to perform an analysis by birth cohort. This shows an increase in the degree of intergenerational income mobility over time. Income mobility is also greater for younger age groups. Finally, we construct quartile transition matrices that suggest intergenerational income mobility is higher in Canada than in the U.S. or the U.K. because there is more mobility at the top and (to a lesser extent) at the bottom of the earnings distribution. To drawn implications for public policy, the next step would be to investigate the dynamic process behind the transmission of economic status between two generations.

There are some important caveats that must be kept in mind when assessing our results. Since detailed occupation codes are not released in the public use files of the General Social Surveys, we had to estimate average occupational income for only 15 occupational groups. It is difficult to know whether this averaging process over detailed occupation categories and individuals of different ages brings us closer to an ideal estimate of the father's permanent income than estimates that average individual income for a few years. The best test of our methodology would be to apply it to the same U.S. data used in other studies and compare the findings.



## Notes

This study was partially conducted as Lefebvre's Masters thesis at Université de Montréal. Fortin gratefully acknowledges financial support from the Social Sciences and Humanities Research Council of Canada and from the Fonds FCAR, Quebec. The contents of this study are the sole responsibility of the authors, and in particular should not be attributed to Statistics Canada.

- <sup>1</sup> Note that the Census tables average income from individuals aged 15 and up. Because employment among young people went down from 1986 to 1990, it is possible that the average age of that sample went up, thus mimicking our sample more closely.
- <sup>2</sup> The differences between the 1986 and 1994 results are not statistically significant. Further, the reported standard errors do not take into account the fact that the measure of the father's income is an estimate and thus probably overstate the true standard errors.
- <sup>3</sup> The estimated average occupational income for the daughters sample are average occupational income from a women sample.

## Bibliography

- ALTONJI, Joseph G. and Thomas A. DUNN (1991). "Relationships among the Family Incomes and Labor Market Outcomes of Relatives." *Research in Labor Economics*. Vol.12, 269-310.
- ATKINSON, Anthony B. (1981). "On Intergenerational Income Mobility in Britain." *Journal of Post-Keynesian Economics*. Vol. 3, 194-217.
- BECKER, Gary S. and Nigel TOMES (1986). "Human Capital and the Rise and Fall of Families." *Journal of Labor Economics*. Vol. 4, S1-S39.
- BJÖRKLUND, Anders and Markus JÄNTTI (1997). "Intergenerational Mobility of Economic Status: Is the United States Different?" Paper Presented at the Annual Meetings of the American Economic Association, New Orleans.
- CORAK, Miles and Andrew HEISZ (1998). "The Intergenerational Earnings and Income Mobility of Canadian Men: Evidence from Longitudinal Income Tax Data." Ottawa: Statistics Canada, Analytical Studies Branch Research Paper No. 113.
- CORAK, Miles and Andrew HEISZ (1995). "The Intergenerational Income Mobility of Canadian Men." *Canadian Business Economics*. Vol. 4, 59-69.
- DEARDEN, Lorraine, Stephen MACHIN and Howard REED (1997). "Intergenerational Mobility in Britain." *Economic Journal*. Vol 107, 47-66.
- DEARDEN, Lorraine, Stephen MACHIN and Howard REED (1995). "Intergenerational Mobility in Britain." The Institute for Fiscal Studies, Working Paper Series No. 95/20.
- FORTIN, Nicole M. and Thomas LEMIEUX (1997). "Income Redistribution in Canada: Minimum Wages versus Other Policy Instruments." Paper Presented to the Adapting Public Policy to a Labour Market in Transition Conference, Institute for Research on Public Policy.
- NEWAY, Whitney K. (1985). "Generalized Method of Moments Specification Testing." *Journal of Econometrics*. Vol. 29, 229-256.
- PETERS, H. Elizabeth (1992). "Patterns of Intergenerational Mobility in Income and Earnings." *Review of Economics and Statistics*. Vol. 74, 456-466.
- PINEO, Peter C. (1985). "Revisions of the Pineo-Porter-McRoberts Socioeconomic Classification of Occupations for the 1981 Census." Program for Quantitative Studies in Economics and Population, McMaster University, Research Report No.125.
- PINEO, Peter C., John PORTER and Hugh A. McROBERTS (1977). "The 1971 Census and the Socioeconomic Classification of Occupations." *Revue Canadienne de Sociologie et d'Anthropologie*. Vol.14, 91-101.
- SOLON, Gary (1992). "Intergenerational Income Mobility in the United States." *American Economic Review*. Vol. 82, 393-408.
- ZIMMERMAN, David J. (1992). "Regression Toward Mediocrity in Economic Stature." *American Economic Review*. Vol. 82, 409-429.



## Chapter 5

# How to Get Ahead in Life: Some Correlates of Intergenerational Income Mobility in Canada

MILES CORAK AND ANDREW HEISZ

---

The issue of child poverty has such a resonance among policy makers, and Canadians in general, because being raised in a “poor” family may have long-term consequences. It is believed that childhood and teenage experiences influence health, education, and labour market outcomes in adulthood to some important degree, and indeed that poverty may be transmitted through the generations. In this sense, the relationship between childhood experience and adult outcomes is central to the conduct of labour market and social policy.

This relationship has been the topic of a great deal of empirical research from a variety of disciplines. A large part of the economic literature has taken the form of an examination of the correlation between the income levels of young adults and the incomes their fathers earned during their early teenage years. Many sociological studies also deal with this process, but tend to focus on the relationship between the occupational status of the parent and either the educational or occupational attainment of the child. These correlations are certainly important—offering at the very broadest level an indication of the extent of equality of opportunity—but it is probably fair to suggest that they fall short of offering an explanation of the process at work.

It is very important to move to this level if policy is to be made in an informed way. For example, policy makers need to understand the degree to which money matters for the long-term prospects of children. Does low-income *per se* contribute to disadvantage, or is low-income merely a reflection of other underlying factors? If factors other than low income are the true influences on a child's future prospects, then a policy thrust involving more than simply transferring money to parents is in order. Mayer (1997) clearly summarizes this issue. Our objective is to take a first step in examining some of the possible correlates of how children get ahead in life.

The focus of this chapter is on the extent and nature of intergenerational income mobility, that is the degree to which an individual's income (as an adult) is related to the income earned by his or her parents (during the individual's childhood). As such our analysis is related to the economic literature surveyed for example in Becker and Tomes (1986), and more recently by Björklund and Jäntti (1997). However, we follow Hill and Duncan (1987) in suggesting that distinguishing between the various components of a family's income provides a way of incorporating both economic and sociological explanations into an empirical model of income mobility.

We use data associated with the income tax system to examine the income mobility of a large sample of young Canadian men and women, and begin by noting that there is a great deal of income mobility in Canada (indeed possibly more than in the United States). Even so, there is a strong relationship between the income levels of a father and the income that his son or daughter will ultimately earn as an adult. We analyse this relationship by focusing on three broad sets of factors: the amount and composition of the father's income; the characteristics of the neighbourhood; and the structure of the family. We find that an individual's income is related not just to the level of parental income but also its composition. In particular, one of the most significant correlates of an individual's adult income is whether or not the father reported earning any asset income. The very fact of having asset income implies a premium of about \$3,000 over individuals whose fathers report no asset income. The opposite occurs, although not to the same degree, if the father reported receiving unemployment insurance (UI) benefits. The amount of UI income, however, does not have a statistically significant effect on the adult incomes of the children. In general, market sources of income are positively associated with the child's adult



income, while there is no significant association with non-market sources. We also find a very strong influence of family structure on the labour market outcomes of children: the earnings of other family members (more specifically the influence of the mother's income on the daughter's), the number of siblings, and single parenthood. Some of these findings suggest that parents, through their labour market behaviour, offer important role models for children.

The other major background influences on individual incomes are the median income of the neighbourhood in which they lived, and whether the father moved or not during the individual's adolescence. For every thousand dollar increase in the median neighbourhood income sons can expect on average to earn \$400 more as young adults, but the association is only about a fifth as strong for daughters. Further, those of either gender who experienced a residential move or a series of moves during adolescence earn from \$500 to almost \$2,000 less than those who did not experience a move.

While our analysis does offer a basis for integrating both economic and sociological explanations of intergenerational income mobility, we remain very cautious in offering any sort of causal interpretation to many of our findings. In our view the variables we have pointed to, especially the presence of asset income but including UI, offer signals of unobserved variables related to the structure of families and individual characteristics that determine the adult incomes of children. In this way, we tentatively conclude that factors other than just money determine a child's labour market prospects.

## 1. A Framework for Analysis

The starting point for the empirical analysis of intergenerational income dynamics is an equation of the form:

$$Y^{\text{child}}(i,t) = \beta_0 + \beta_1 Y^{\text{father}}(i,t-1) + \varepsilon(i)$$

where  $Y$  represents income,  $i$  indexes a father-child pair, and  $\varepsilon(i)$  is a random component specific to the pair. The objective of the analysis is to obtain an unbiased estimate of  $\beta_1$ , which can essentially be taken to be the correlation coefficient between a child's income (as an adult) and the income his or her father earned (during the child's adolescence). This correlation is a broad indicator of the degree of equality of opportunity in the labour market, and given recent research would seem to be about half as strong in Canada

as in the United States. This indicates a great deal of mobility in the Canadian labour market.<sup>1</sup>

Our empirical analysis seeks to expand the number of explanatory variables in this model and is structured around the following general equation:

$$Y^{\text{child}}(i,t) = f(\text{amount and composition of father's income at } t-1, \text{ neighbourhood characteristics at } t-1, \text{ family structure at } t-1, \text{ other controls at } t-1) + \varepsilon(i).$$

In particular,  $Y^{\text{child}}$  refers to the adult annual income of the child as indicated on his or her income tax return. For the most part, we use a measure of income defined to be total market income, namely total income from all sources less any income from government transfers (specifically UI benefits and Income Assistance). The variables associated with the father's income are of two types. The first is a series of indicator variables that indicate the presence of a particular type of income. These take the value of 0 if no income is present from a particular source and a value of 1 if at least one dollar of income from that source is indicated in the tax files. (There are six such variables corresponding to each type of income we recognize: earnings, self-employment income, asset income, UI benefits, Family Allowance, and Other Income.) The second set of variables associated with the father's income is simply the amount of income from each of these sources.

Our motivation for using this formulation, and in particular for distinguishing "first dollar" from "additional dollar" effects, comes from the discussion in Hill and Duncan (1987). They point out that economic explanations of intergenerational income mobility tend to view income as a resource that can be used for investment in the human capital of children, while non-economic explanations recognize that parental income may be a signal of other characteristics (such as attitudes and aspirations) that are important in the outcomes of children.

Hill and Duncan suggest that Becker's theory of intergenerational dynamics implies that income is perfectly fungible. In particular, Becker (1991) argues that changes in the level of transfer income to the family will lead to offsetting reallocations of familial resources so that the impact on the human capital investments in the children is unchanged. In Hill and Duncan's view, this implies that different sources of family income should have the same effect on the human capital obtained by the child. That is, the

coefficients associated with the amount of each type of income in a model such as that described above should be the same. This is to be contrasted with socialization theory, which focuses on the role models that parents offer their children. Hill and Duncan suggest that the amount of parental labour income from a particular source may indicate labour market success, and in this way may offer a model for the child and influence the child's labour market outcomes. In particular, this channel should be stronger between fathers and sons, than between fathers and daughters. The implication from this perspective is that the coefficients estimated on the various components of income should differ. Mayer (1997) uses a similar argument to suggest that if different sources of income have different influences then more than money matters for the outcomes of the child.

One variant of this perspective is the impact of government transfers. Just as labour market success may serve as a positive role model encouraging the child's attainment, so it is argued that reliance on transfers is seen to have the opposite effect. This "welfare culture" argument has often raised in the United States (Gottschalk 1990; Levine and Zimmerman 1996). To follow up on this notion, we draw a distinction between market based income sources and non-market sources (particularly UI and Family Allowance benefits). We would expect, for example, to see a different coefficient value associated with the amount of UI income earned by the father as compared to the values associated with market based sources of income (particularly earnings and self-employment income).

If hypotheses of this sort are to be examined, it is important to control for all other characteristics of the father that may influence his child's future labour market outcomes. If this is not the case, it is very likely that the measures of income will be correlated with the unmeasured characteristics of the father associated with the productive characteristics of the son. Hill and Duncan suggest that this is likely with income from uninherited assets or Income Assistance. If so, we would expect to observe significant first dollar effects of asset income and transfer income; the first being positive, the latter possibly negative. This is the major motivation for including the first dollar effects in our regression models.

The second set of variables we use are also motivated by demonstration, or role model, effects. These are often considered to operate

not only within the family but also in the community or neighbourhood, and may be especially important for young adolescents (as opposed to primary age children).<sup>2</sup> One indicator of this may be the overall economic status of a neighbourhood, as measured by the average or median income. The level of community income may of course directly affect the eventual labour market outcomes of children through the nature and quality of the schools and other infrastructure in the community. It is also possible that there are peer and network effects that encourage school attainment and labour market success. The tendency to drop out of high school is often looked at in these terms. Further, neighbourhoods characterized by a greater dispersion in the level and composition of income may indicate a wide range of peer effects that may be either positive or negative. Accordingly, our neighbourhood variables include, in addition to the median income, the standard deviation of income in the community, the fraction of tax filers in the neighbourhood receiving UI, and the fraction receiving income from self-employment.

Associated with this group of variables is a measure of what Coleman (1988) has referred to as "social capital," but which might more generally be considered as an aspect of network or peer group effects. He considers social capital to have three dimensions: the set of expectations and obligations (essentially reputations) that develop in a community, the set of information channels, and the set of norms or sanctions that exist at the community level. While all three are important in the intergenerational mobility of children, he focuses on the conditions that allow the latter to arise. A well-established set of norms or sanctions can serve to reinforce parental human capital investment in children. In particular, he suggests that this will be strongest when the relationship between children, say in the context of a school, is mirrored at the level of the parents so that the parents' friends are also the parents of their children's friends. While he does not offer a direct measure of this "intergenerational closure" he suggests that an appropriate proxy is the number of times the child has changed schools as this indicates a lack of continuity and hence the breaking up of networks.<sup>3</sup>

For example, Coleman finds that in his US data set the probability of dropping out of high school is about 50% higher for those individuals who moved at least once (16.7% versus 11.8%), and about double for those who moved twice (23.1% versus 11.8%). However, the interpretation of this as a direct effect related to "social



capital" is difficult to make if the number of moves is associated with unobserved parental characteristics that are also important in determining intergenerational mobility (Aaronson, 1996). Even so, Coleman's discussion is suggestive of a potentially important variable not often considered in studies of intergenerational income mobility.

Our final set of variables is related to family structure. These include indicators of whether the father was married, single, or living in a common-law relationship, as well as the number of siblings in the household. Being raised by an intact family is often considered to be advantageous for children (Le Bourdais and Marcil-Gratton, chapter 6; Dooley et al., chapter 7; Manski et al., 1992; McLanahan and Sandefur, 1994). We also use information on the labour market activities of other family members: whether the spouse worked or not, and the amount of income earned. This information provides a control not only for the total economic resources available to the household, but also more information on the possibility and strength of role model influences. For example, the labour market activity of the mother and the income she earns may have more of an influence on the labour market outcomes of daughters than of sons.

## 2. A Descriptive Analysis

Our study is based upon income tax information on a cohort of young men and women in 1994 and upon similar information on their fathers during the late 1970s and early 1980s. Briefly, we select a sample of individuals aged 16 to 19 years in 1982, who filed an income tax return in that year (while still living with their parent), who had a father present during that year, and who are therefore 28 to 31 years of age in 1994. Our sample is very large, numbering about 400,000 father-child pairs, and not subject to problems of attrition or reporting errors that are endemic to survey data. In addition very detailed information on the composition of income is available, permitting a distinction between: employment earnings, self-employment income, asset income, UI benefits, Family Allowance benefits, and "other" income.<sup>4</sup> We use the father's 1982 income (and its components) in our regression analysis. (The appendix contains a detailed discussion of the data.)

Country-wide income tax files are used to derive the characteristics of the neighbourhood

in which the father-child pair lived. A "neighbourhood" is defined for present purposes as the first three digits of the postal code, the Forward Sortation Area (FSA), for 1982. Our measure of whether the social capital of the child was intact is the number of moves the father made between 1978 and 1982. This information is derived from the postal codes on the father's income tax returns over these years. A move is defined as a change in the postal code between any two sequential years.

The other variables we are able to derive include: the province of residence, the income earned by other family members, the number of children in the family, and the official language in which the income tax return was filed (French or English). We also have information on the structure of the family: married couple, only the father being an income tax filer; married couple, both filers; single father; father in a common-law relationship.

In addition to having certain advantages over survey data, the use of administrative data entail certain disadvantages. We lack, for example, information on some common correlates of intergenerational income mobility, namely the education levels of the parents, as well as their occupations and wage rates. Another potential disadvantage concerns the possibility of having chosen a non-random population. In particular, in order for the children to be matched with the father we require their SINS, and this implies that they must have been active in the labour market to the point of having filed an income tax return. Individuals who are working may be a self-selected group who are more motivated than the average, and who will ultimately have more work experience by the time they are adults. Indeed, the need for a SIN is one of the reasons that we restrict our analysis to those individuals who are at least 16 years of age. In Corak and Heisz (1998) we examine the possible selection bias that may intrude upon a model of the correlation between father and son's income, and find that while our sample is in fact non-random this does not influence the results.

Finally, we are not examining households headed by single mothers, a group that is often cited as important in discussions of child poverty. Our choice of individuals who had a father present is intended as a first step in a fuller analysis, and our original concern was to choose a sample similar to that used in much of the existing literature dealing with intergenerational



income mobility. The use of administrative data in such studies is novel, and we have chosen the sample in order to provide a basis for comparing our results with the existing work that relies almost exclusively on survey data. As such, our findings should be interpreted as a “best” case scenario.

Table 5.1 presents the average market income of the sons and daughters in our sample cross-classified according to the most pertinent discrete variables in our analysis. (A complete set of descriptive statistics is presented as Tables 5A.1 and 5A.2 in the appendix.) Most of the averages for the characteristics within a grouping are statistically different according to  $t$  or  $F$  tests, the exceptions being the majority language indicator for sons, and the employment income and Family Allowance indicators for daughters. The largest differences relate to the presence of asset income. Sons whose fathers reported having asset income averaged more than \$5,000 in earnings than sons whose father reported no asset income. For daughters, the difference between these two groups is, at about \$4,100, also large. It is also notable that men whose fathers received UI earn on average \$3,760 less than their counterparts, and women in a similar position earn about \$2,700 less. Individuals whose parent did not change residence during their early teen years earned about \$800 more than those who moved once, and almost \$4,000 more than those whose parent moved three or more times in a five year period. Finally, it should be noted that individuals from husband-wife families earned about \$3,500 to \$4,500 more than individuals from other family types. In fact, daughters from families in which both parents filed income tax returns (that is in which both were actively engaged in the labour market) earned slightly more on average than daughters from families in which only the father filed. (The  $t$ -statistic for a test of the null hypothesis that the two means are the same is 3.4.) The opposite is the case for the sons, but the observed difference between the two means is not statistically significant ( $t = 1.5$ ).

Table 5.2 presents univariate regression results of the continuous variables in our analysis against the market incomes of sons and daughters. The numbers in this table should be interpreted as the change in the dependent variable (the income of sons or daughters expressed in dollars) for each thousand-dollar change in the independent variable. There is a positive association between the adult incomes of the children

and the market based incomes (earnings, self-employment income, asset income) of fathers, but a negative association with the non-market sources (UI and Family Allowance). In addition, the association seems to be stronger for sons than for daughters. The negative association between the amount of Family Allowance income and the child’s adult market earnings may seem puzzling. As the multivariate analysis in the following section reveals, this is because Family Allowance is correlated with the province of residence and the number of children. Since the amount of Family Allowance income is not measured on a per child basis the univariate results are revealing a negative sibling effect. It is also interesting to note that daughter’s adult income is much more strongly related to the income of other family members (essentially the mother but also siblings) than it is to the father’s income. For every \$1,000 increase in the fathers’ income the income of the average daughter increases by \$62; for every \$1,000 increase in the income of other family members it goes up almost twice as much, \$115. In conjunction with the results in the previous paragraph (dealing with the effect of having a working mother) this hints at the possibility of demonstration or role model effects. Son and daughter incomes are also positively associated with the neighbourhood median income, the standard deviation of income in the neighbourhood, and the fraction of self-employed in the neighbourhood, but are negatively associated with the fraction of UI recipients. With the exception of the fraction of UI recipients, all these coefficients are about the same for both men and women.

Another perspective on the role of some of these variables is possible by examining the rank of the children (as adults) in the income distribution according to the rank their fathers occupied. Accordingly, in what follows we examine the transition matrices relating the father’s income decile to the child’s income decile. Given the concern with the long-term consequences of low-income during childhood we focus on the children of the lowest income fathers, those in the bottom decile. (The complete matrices for both sons and daughters are presented in the appendix.)

If there were no association between father and child incomes the chances of attaining any decile would be the same, namely 10%. Statistically significant deviations from 10% indicate less than complete intergenerational income mobility. Figure 5.1 reveals that 14.5% of the sons of bottom decile fathers had income that placed

Table 5.1  
**Background Characteristics and the  
 Market Incomes of Sons and Daughters**

Variable	Sons			Daughters		
	Number of Observations	Average Market Income	p- value	Number of Observations	Average Market Income	p- value
<b>First Dollar Effects</b>						
No Earnings	15,526	24,860		12,910	17,857	
Some Earnings	143,035	26,818	0.00	113,863	17,856	0.99
No Self-Employment Income	135,845	26,443		107,960	17,652	
Some Self-Employment Income	22,716	27,719	0.00	18,813	19,028	0.00
No Asset Income	41,042	22,851		30,985	14,712	
Some Asset Income	117,519	27,945	0.00	95,788	18,873	0.00
No Unemployment Insurance	133,644	27,217		107,835	18,259	
Some Unemployment Insurance	24,917	23,457	0.00	18,938	15,565	0.00
No Family Allowance	40,392	27,048		31,062	17,754	
Some Family Allowance	118,169	26,482	0.00	95,711	17,890	0.22
No Other Income	108,063	26,329		85,990	17,666	
Some Other Income	50,498	27,262	0.00	40,783	18,257	0.00
<b>Number of Residential Moves</b>						
No Moves	124,529	26,864		100,589	18,101	
One Move	26,260	26,096		20,197	17,268	
Two Moves	6,447	24,954		5,011	15,975	
Three or More Moves	1,325	22,906	0.00	976	14,427	0.00
<b>Individual/Family Characteristics</b>						
Did Not Use Majority Language	5,989	26,406		4,819	18,411	
Used Majority Language	152,572	26,635	0.51	121,954	17,834	0.02
Married, Wife did Not Work	20,005	27,048		15,224	17,519	
Married, Wife Worked	132,017	26,753		107,035	18,022	
Single	4,757	22,887		3,146	15,293	
Common-Law	1,782	22,488	0.00	1,368	14,568	0.00

**Note:** p-value refers to the marginal significance level for a t or F test of the null hypothesis that the within groups averages are equal.

them in bottom 10% (as adults) of their cohort. For daughters the comparable proportion is 13.6%.<sup>5</sup> In general, sons raised by low-income fathers are less likely to move into the upper half of the income distribution, more likely to remain in the bottom half, and most likely to occupy the same position as their fathers. Daughters are also most likely to remain in the bottom of the income distribution, and certainly less likely to reach the top 20%, but are about equally as likely to be anywhere else in the income distribution.

Figure 5.2 presents similar information according to the composition of the father's income: whether or not the father reported any income from self-employment, assets, or UI. In other

words, in conjunction with Figure 5.1 these figures offer (for children from low-income fathers) a descriptive look at the relationship between what we have referred to as the "first dollar effects" of these components of income and the relative position of the children in the income distribution. Once again, the role of asset income is the most notable. Individuals whose fathers did not report having asset income (either positive or negative) were much more likely to be in the bottom decile and much less likely to be in the top decile of their cohort as young adults. The probability that these sons were in the bottom decile is 17.1%, versus 12.4% for those with fathers reporting asset income. For daughters the difference is slightly greater (17.1% versus

Table 5.2  
**Correlations between Parental Income, Neighbourhood and Familial Variables,  
 and the Market Incomes of Sons and Daughters**

Variable	Sons		Daughters	
	Coefficient	p-value	Coefficient	p-value
Additional Dollar Effects (\$ per thousand dollar change)				
Earnings	116	0.00	62	0.00
Self-Employment Income	76	0.00	66	0.00
Asset Income	82	0.00	58	0.00
Unemployment Insurance	-830	0.00	-568	0.00
Family Allowance	-1,233	0.00	-929	0.00
Other Income	112	0.00	104	0.00
Neighbourhood Effects				
Median Income (thousands)	459	0.00	475	0.00
Standard Deviation	52	0.00	43	0.00
Proportion of Self-Employed	-256	0.00	-251	0.00
Proportion of UI Recipients	332	0.00	146	0.00
Individual and Family Characteristics				
Rest-of-Family Income	138	0.00	115	0.00
Number of Children	53	0.43	-17	0.65
Number of Observations	158,561		126,773	

**Note:** All regressions were performed using least squares with the market income (in dollars) of sons or daughters as the dependent variable.  
 p-value refers to the marginal significance level of a t test for the null hypothesis that the coefficient is equal to zero.

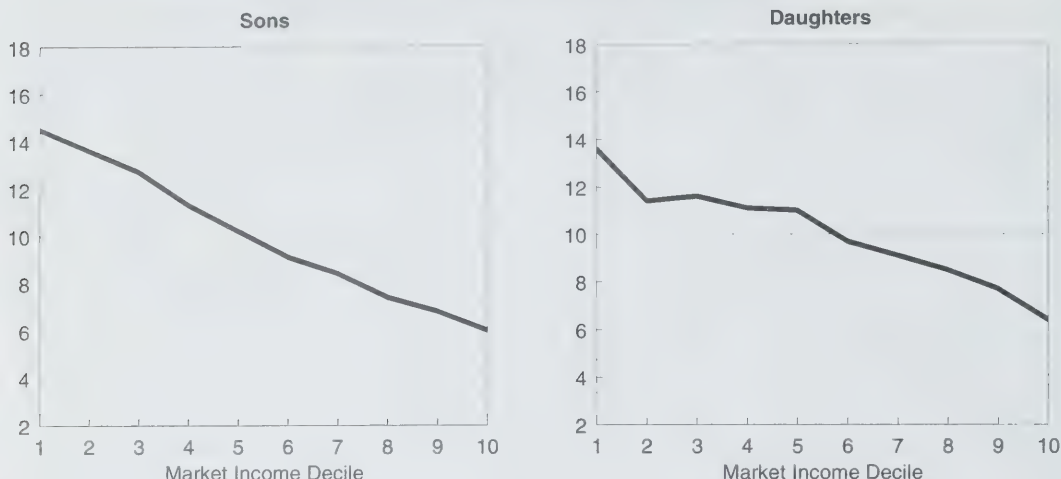
11.1%). Indeed, daughters with fathers reporting asset income are about equally likely to be at any decile in the income distribution (except possibly the top two).

Figure 5.3 offers a stratification by neighbourhood characteristics. The first panel illustrates the rank (of those with bottom decile fathers) according to the median income of the childhood neighbourhood. A “low-income neighbourhood” is considered to be a neighbourhood with a median income in the bottom quartile of all neighbourhoods; a “high-income neighbourhood” is defined in a similar way (on the basis of the top quartile). Generally, those from low-income neighbourhoods are much less likely to move to the upper half of the income distribution, and are most likely to remain in the bottom

decile. This is particularly so for sons. The second panel offers a distinction between those neighbourhoods in which the fraction of UI recipients to the total number of income tax filers is above and below the Canadian average. Sons with bottom decile fathers living in neighbourhoods with an above average proportion of UI recipients are more likely to remain in the bottom half of their cohort, but the differences are not marked (and indeed not even apparent at the bottom decile). On the other hand, daughters living in these neighbourhoods are less likely to leave the bottom decile, much less likely to rise to the top decile, and in general less likely to rise above the fifth decile than their counterparts. This is also the case for the influence of whether the father changed addresses between 1978 and



Figure 5.1  
Relative Outcomes of Children of Bottom Decile Fathers



1982. While sons whose fathers moved are more likely to remain in the bottom decile than those whose fathers did not move (16.6% versus 13.7%), there are no appreciable differences between the two groups elsewhere in the income distribution. An adverse impact of moving, however, is a little clearer for daughters.

### 3. Regression Results

The multivariate regression results for sons are presented in Table 5.3, and for daughters in Table 5.4. Since some individuals have very large incomes, we are somewhat concerned about the sensitivity of least squares to outliers. We do two things to address this. First, as outlined in the appendix, we delete those influential observations with very large negative values for some of the income components. In many cases, these negative values were offset by large positive values for other components, suggesting that tax considerations influenced the way in which income was reported. Second, we also conduct an analysis using quantile regressions at the 50<sup>th</sup> percentile. Given that these are based on the minimization of absolute deviations about the median they are not as sensitive to outliers as least squares. Tables 5.3 and 5.4 contain the results of least squares estimation, quantile regressions at the median, but also quantile regressions about the 10<sup>th</sup> decile and 90<sup>th</sup> decile of the dependent variable. The latter also offer a

check on the average/median results by indicating whether individuals at the lower or upper end of the income distribution are more or less sensitive to the influence of a particular variable. (Some of the results in Figures 5.2 and 5.3 are suggestive of this possibility.) Taken together they also offer an indication of the influence of a variable on the spread of the income distribution. This influence is given by an estimate of the difference between the 90<sup>th</sup> and 10<sup>th</sup> deciles in the last column of tables 5.3 and 5.4.

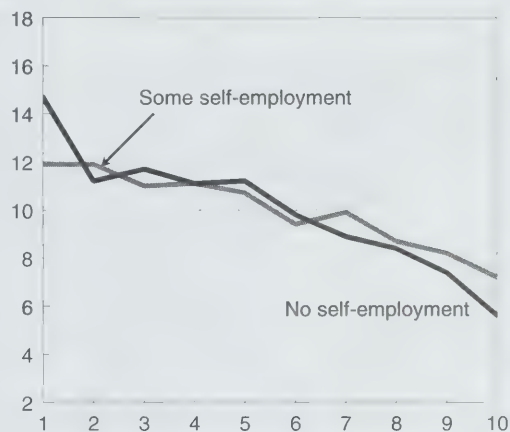
The coefficients in these tables should be interpreted as the dollar change in the income of sons or daughters for a unit change in the independent variable. Boldfaced values represent a marginal significance level of 0.05 or less, while those boldfaced and shaded have a level of 0.01 or less.<sup>6</sup> Almost all of the first dollar effects are large and statistically significant. As the discussion in the previous section suggests, the first dollar effect associated with asset income is striking, amounting on average to over \$3,000 for men and almost \$2,700 for women. (The estimates at the median are lower.) For men there is no significant difference between the coefficient estimates at the 10<sup>th</sup> and 90<sup>th</sup> percentiles, implying that this effect is felt throughout the income distribution and is not a result of a large effect for just some individuals. (As Table 5.1 and Tables 5A.1 and 5A.2 in the appendix illustrate, about 75% of the sample report a non-zero amount of asset income. This proportion is so large because

**Figure 5.2**  
**The Composition of Father's Income and Child's Outcome**  
**(Bottom Decile Fathers)**

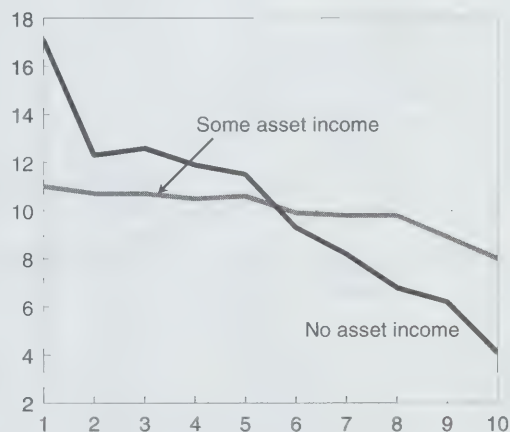
**Sons**

**Daughters**

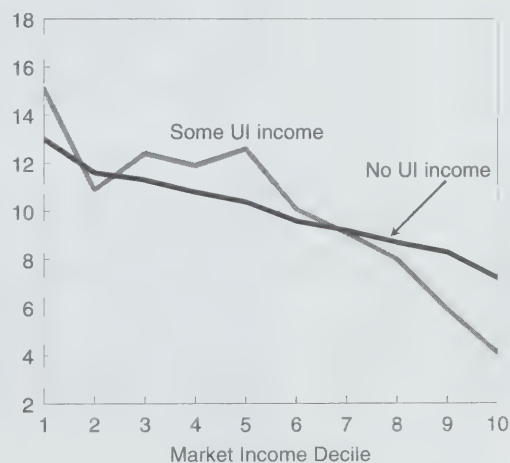
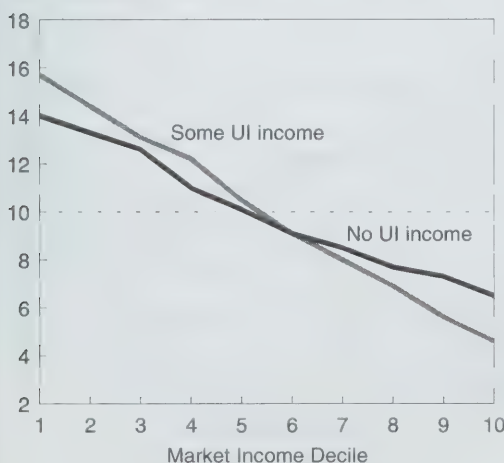
**A. First Dollar Effect of Father's Self-Employment Income**



**B. First Dollar Effect of Father's Asset Income**



**C. First Dollar Effect of Father's UI Income**



**Figure 5.3**  
**Neighbourhood Background and (Bottom Decile Fathers) Child's Outcome**

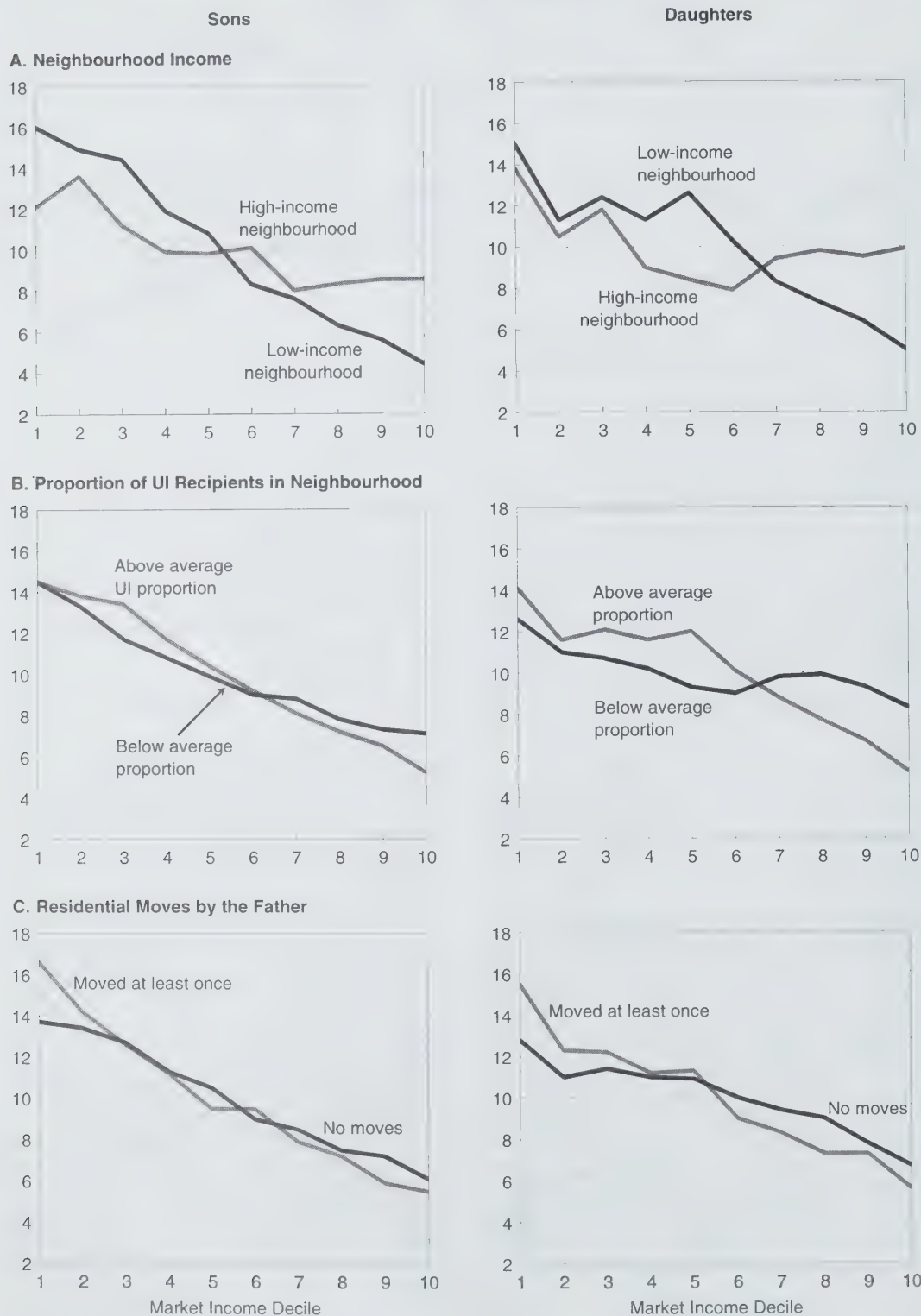




Table 5.3  
Multivariate Regression Results: Sons

	Least Squares	Quantile Regressions			
		50 <sup>th</sup> Percentile	10 <sup>th</sup> Percentile	90 <sup>th</sup> Percentile	90 <sup>th</sup> less 10 <sup>th</sup>
First Dollar Effects					
Earnings	1,003.5 (657.4)	<b>557.1</b> (187.3)	<b>514.0</b> (185.3)	<b>-1,891.4</b> (478.2)	<b>-2,405.4</b> (402.5)
Self-Employment Income	<b>1,157.2</b> (295.4)	153.3 (164.8)	63.7 (221.7)	<b>2,384.4</b> (360.5)	<b>2,320.7</b> (359.9)
Asset Income	<b>3,106.9</b> (177.3)	<b>2,254.6</b> (94.8)	<b>1,875.2</b> (107.6)	<b>2,066.0</b> (150.4)	190.8 (186.2)
Unemployment Insurance	<b>-1,441.9</b> (233.6)	<b>-481.1</b> (187.3)	<b>-469.5</b> (156.4)	<b>-717.1</b> (317.4)	-247.6 (313.7)
Family Allowance	-324.2 (225.5)	42.5 (116.1)	42.1 (136.2)	<b>-621.5</b> (254.2)	<b>-663.6</b> (215.0)
Other Income	<b>564.6</b> (169.6)	<b>512.3</b> (106.0)	201.6 (127.3)	<b>571.8</b> (190.4)	370.2 (212.6)
Additional Dollar Effects (per thousand dollars)					
Earnings	<b>90.7</b> (22.1)	<b>86.6</b> (3.8)	<b>23.3</b> (3.6)	<b>217.0</b> (8.9)	<b>193.7</b> (10.2)
Self-Employment Income	<b>76.2</b> (17.0)	<b>48.6</b> (6.3)	8.2 (5.7)	<b>145.3</b> (17.6)	<b>137.0</b> (21.5)
Asset Income	<b>27.7</b> (12.8)	<b>35.3</b> (7.6)	4.5 (5.4)	<b>273.0</b> (23.5)	<b>268.5</b> (16.2)
Unemployment Insurance	-9.7 (58.3)	-81.5 (44.7)	<b>-111.0</b> (38.0)	<b>236.5</b> (51.0)	<b>347.5</b> (78.4)
Family Allowance	457.3 (315.0)	246.4 (176.2)	<b>349.6</b> (138.0)	<b>845.4</b> (295.3)	495.8 (305.5)
Other Income	<b>54.1</b> (16.4)	<b>40.2</b> (9.8)	-3.9 (10.5)	<b>130.5</b> (21.4)	<b>134.5</b> (15.1)
Neighbourhood Effects					
Median Income (thousands)	<b>367.8</b> (41.2)	<b>366.8</b> (25.3)	<b>175.5</b> (32.0)	<b>416.4</b> (50.4)	<b>240.9</b> (46.8)
Standard Deviation	6.9 (5.7)	<b>-7.3</b> (2.7)	<b>-11.0</b> (2.1)	3.8 (3.5)	<b>14.8</b> (4.6)
Proportion of Self-Employed	<b>120.8</b> (32.5)	-1.3 (21.2)	<b>64.2</b> (17.5)	<b>161.5</b> (35.1)	<b>97.3</b> (34.9)
Proportion of UI Recipients	<b>35.2</b> (15.2)	<b>67.6</b> (10.0)	<b>66.9</b> (12.2)	<b>47.2</b> (18.2)	-19.7 (22.2)
Moved Once	<b>-544.2</b> (197.8)	<b>-887.0</b> (139.5)	<b>-867.1</b> (135.5)	<b>-434.7</b> (159.7)	432.4 (224.8)
Moved Twice	<b>-1,058.7</b> (325.6)	<b>-1,488.9</b> (261.6)	<b>-1,448.7</b> (166.7)	68.1 (405.4)	<b>1,516.8</b> (443.0)
Moved Three Times	<b>-2,134.3</b> (583.9)	<b>-2,281.5</b> (286.4)	<b>-1,475.9</b> (406.6)	-384.3 (691.3)	1,091.7 (738.2)
Individual Characteristics					
Majority Language	-593.0 (415.7)	<b>711.1</b> (232.1)	<b>556.2</b> (255.5)	<b>-1,014.0</b> (415.9)	<b>-1,570.2</b> (519.2)
Number of Children	<b>-299.1</b> (127.8)	<b>-408.3</b> (69.8)	<b>-232.7</b> (39.5)	<b>-489.0</b> (111.9)	<b>-256.3</b> (96.5)
Rest-of-Family Income	<b>89.4</b> (14.0)	<b>48.5</b> (3.7)	<b>35.9</b> (4.4)	<b>115.7</b> (11.4)	<b>79.8</b> (10.6)
Married, Wife Worked	-25.7 (372.6)	181.7 (129.2)	<b>-296.9</b> (122.1)	<b>731.7</b> (276.7)	<b>1,028.6</b> (343.6)
Single	<b>-1,600.0</b> (398.8)	<b>-1,930.8</b> (353.3)	<b>-1,646.9</b> (291.5)	-110.4 (403.3)	<b>1,536.5</b> (605.4)

Table 5.3 – Concluded  
Multivariate Regression Results: Sons

	Least Squares	Quantile Regressions			
		50 <sup>th</sup> Percentile	10 <sup>th</sup> Percentile	90 <sup>th</sup> Percentile	90 <sup>th</sup> less 10 <sup>th</sup>
Common-Law	<b>-2,245.5</b> (630.3)	<b>-1,620.3</b> (510.2)	<b>-1,560.4</b> (413.9)	<b>-1,532.0</b> (774.0)	28.5 (842.8)
Constant	<b>12,915.3</b> (1,045.1)	<b>13,264.9</b> (692.4)	<b>-2,423.0</b> (719.2)	<b>27,578.9</b> (1,663.0)	<b>30,001.9</b> (1,591.4)
Number of Observations	158,561	158,561	158,561	158,561	158,561
Adjusted R <sup>2</sup>	0.0421	0.0284	0.0112	0.0546	

**Note:** The dependent variable is the level of the child's total market income for 1994. Independent variables are for 1982. All income measures are expressed in 1986 constant dollars using the CPI as the deflator. The measures of the father's income, neighbourhood median income, the standard deviation of incomes in the neighbourhood are expressed in thousands of dollars. Controls for province of residence, age and age<sup>2</sup> of both the father and the child are also included in all of the models.

( ) indicates standard error. **Boldface** indicates significance at 0.05, **Boldface** and shading indicates significance at 0.01. For the least squares results the standard errors are robust to heteroscedasticity. For the quantile regressions the standard errors are derived from a bootstrap using 20 replications.

even interest on bank deposits during an inflationary period may generate sufficient income to require reporting.) Having a father who reported self-employment income is also of benefit to the child, but only for those destined, at least in the case of sons, for the top of the income distribution. (For daughters, a positive relationship exists as well at the median.) The opposite pattern prevails if the father reported earnings: those at the 90<sup>th</sup> percentile are disadvantaged. Finally, parental receipt of UI has a negative association with the child's adult income.

The amount of the father's market based income generally has a positive impact on the child's income. The magnitudes are about the same for all of the income types. The coefficients on the amount of earnings, self-employment income, and asset income are all within two standard errors of each other. (The asset coefficient is, nonetheless, the smallest of the three.) In contrast, the amount of UI income (which might be taken as an indicator of the severity of unemployment as it is related to the duration of unemployment spells) does not, on average, matter for the child's adult income. That being said, all the coefficients are larger for sons than for daughters, with the earnings variable for sons being about twice the size of that for daughters. The exceptions to this are the influences of

asset income and other income, which are almost exactly the same for men and women.

With respect to the neighbourhood variables, it is clear that the number of moves is strongly and negatively related to the child's income: a single move being associated with about \$540 less income for both sons and daughters; three moves with about \$2,100 less. The results for the 50<sup>th</sup> percentile are all larger in absolute value, suggesting that the average effects given by least squares are probably understatements. The median income of the neighbourhood is a positive correlate of sons' income, every \$1,000 increase being related to about a \$370 increase in eventual income earned by the son. This would imply that a one standard deviation increase in this variable (\$2,852) would be associated with a \$1,050 increase in the son's adult income. Median neighbourhood income, while positive and statistically significant, is not on average strongly related to the daughter's income. This masks, however, a stronger positive correlation at the 90<sup>th</sup> percentile. The fraction of self-employed and the fraction of UI recipients are related to the incomes of both sons and daughters, but in a different way. Each unit increase in these variables is associated with decreases in daughters' income by on average about \$90 and \$150 respectively, but with increases of the son's income by around \$120 and \$35.

Table 5.4  
Multivariate Regression Results: Daughters

	Least Squares	Quantile Regressions			
		50 <sup>th</sup> Percentile	10 <sup>th</sup> Percentile	90 <sup>th</sup> Percentile	90 <sup>th</sup> less 10 <sup>th</sup>
First Dollar Effects					
Earnings	-137.4 (420.9)	-67.2 (250.2)	-20.3 (36.2)	-1,757.2 (338.7)	-1,736.9 (309.4)
Self-Employment Income	850.0 (180.4)	337.2 (126.6)	61.0 (34.7)	1,642.3 (271.0)	1,581.3 (181.0)
Asset Income	2,698.0 (116.2)	2,665.4 (113.6)	152.5 (21.1)	2,528.5 (183.8)	2,376.0 (108.4)
Unemployment Insurance	-865.4 (175.7)	-457.8 (212.9)	-30.2 (23.8)	-1,112.7 (167.9)	-1,082.5 (286.0)
Family Allowance	507.9 (149.4)	690.9 (150.9)	63.5 (25.5)	568.8 (214.8)	505.4 (180.5)
Other Income	195.2 (120.9)	205.0 (143.5)	38.8 (22.3)	-68.8 (176.0)	-107.7 (151.1)
Additional Dollar Effects (per thousand dollars)					
Earnings	47.2 (11.7)	52.2 (5.3)	7.9 (1.4)	137.1 (8.9)	129.2 (8.0)
Self-Employment Income	49.7 (7.9)	52.7 (4.2)	13.0 (3.2)	87.0 (6.7)	73.9 (6.5)
Asset Income	28.0 (11.8)	18.8 (5.7)	7.3 (3.5)	173.4 (18.1)	166.1 (25.0)
Unemployment Insurance	-22.8 (41.3)	-64.3 (49.7)	14.3 (5.6)	197.6 (54.4)	183.3 (71.8)
Family Allowance	336.2 (187.5)	-126.3 (145.3)	-0.3 (21.4)	417.3 (225.5)	417.6 (191.8)
Other Income	55.3 (17.1)	26.3 (13.2)	9.6 (4.6)	104.3 (26.7)	94.7 (23.4)
Neighbourhood Effects					
Median Income (thousands)	71.5 (27.0)	4.0 (29.5)	-0.1 (3.6)	147.2 (41.7)	147.4 (32.2)
Standard Deviation	12.7 (2.6)	7.0 (1.7)	2.3 (1.3)	9.0 (2.7)	6.7 (2.5)
Proportion of Self-Employed	-87.8 (20.3)	-252.6 (21.1)	-10.6 (2.3)	-37.5 (26.6)	-26.8 (32.4)
Proportion of UI Recipients	-151.7 (10.4)	-204.9 (13.5)	-6.1 (1.7)	-130.0 (11.5)	-123.9 (12.2)
Moved Once	-553.5 (129.6)	-686.7 (116.6)	-59.3 (17.6)	-411.3 (181.9)	-352.0 (179.9)
Moved Twice	-1,282.3 (239.0)	-1,957.9 (356.7)	-109.4 (24.2)	-975.5 (401.0)	-866.2 (349.3)
Moved Three Times	-1,818.8 (433.7)	-2,328.7 (662.5)	-84.7 (34.9)	-1,555.0 (848.6)	-1,470.3 (637.9)
Individual Characteristics					
Majority Language	-511.3 (255.8)	-1,095.4 (384.8)	31.5 (47.2)	-1,581.7 (288.7)	-1,613.2 (357.6)
Number of Children	-353.0 (68.3)	-278.4 (56.8)	-42.2 (9.2)	-433.9 (62.1)	-391.7 (85.2)
Rest-of-Family Income	81.5 (7.9)	58.4 (5.3)	10.9 (1.4)	95.4 (4.7)	84.5 (7.4)
Married, Wife Worked	233.6 (201.2)	292.5 (159.8)	43.6 (16.2)	581.4 (250.0)	537.8 (218.3)
Single	-544.1 (306.8)	-1,213.0 (328.4)	30.1 (25.2)	-474.5 (487.9)	-504.5 (429.8)



Table 5.4 – Concluded  
Multivariate Regression Results: Daughters

	Least Squares	Quantile Regressions			
		50 <sup>th</sup> Percentile	10 <sup>th</sup> Percentile	90 <sup>th</sup> Percentile	90 <sup>th</sup> less 10 <sup>th</sup>
Common-Law	<b>-915.4</b> (416.1)	<b>-1,361.2</b> (549.9)	22.6 (73.4)	-253.1 (510.8)	-275.8 (589.5)
Constant	<b>16,583.4</b> (733.4)	<b>20,505.0</b> (1,078.8)	-30.6 (112.7)	<b>29,773.8</b> (1,163.0)	<b>29,804.4</b> (960.5)
Number of Observations	126,773	126,773	126,773	126,773	126,773
R <sup>2</sup>	0.0533	0.0275	0.0034	0.0526	

**Note:** The dependent variable is the level of the child's total market income for 1994. Independent variables are for 1982. All income measures are expressed in 1986 constant dollars using the CPI as the deflator. The measures of the father's income, neighbourhood median income, the standard deviation of incomes in the neighbourhood are expressed in thousands of dollars. Controls for province of residence, age and age<sup>2</sup> of both the father and the child are also included in all of the models.

( ) indicates standard error. **Boldface** indicates significance at 0.05, **Boldface** and shading indicates significance at 0.01. For the least squares results the standard errors are robust to heteroscedasticity. For the quantile regressions the standard errors are derived from a bootstrap using 20 replications.

The structure of the family is an important correlate of the adult incomes of both men and women. First, there is no statistically significant impact on the adult incomes of these adolescent children of whether the mother worked or not. These averages, however, mask a positive influence for men at the 90<sup>th</sup> percentile that is countered by a negative influence at the 10<sup>th</sup>, while for women both of these percentiles are positively associated with the presence of a tax-filing mother (even though the median is not statistically different from zero).<sup>7</sup> At the same time, it should be noted that income from other family members, which in the strong majority of cases refers to income from the mother, is positively associated with the adult incomes of the children. The effect, at about \$82 to \$90 for every \$1,000 earned is about the same for both sons and daughters. At the same time, this value is more than 70% higher than the coefficient relating the fathers' earnings to the daughters': in other words daughters' outcomes seem more strongly correlated with the labour market income of their mothers and siblings than to their fathers'.

Second, the contemporaneous number of children in the family is negatively associated with adult outcomes: for every sibling still living at home the adult income of the sample members is lower by about \$300 to \$400.

Third, fathers raising their children without a partner or with a common-law partner had children that ultimately received much lower incomes

as adults than fathers who were married: for sons the common-law effect is probably about -\$1,500, and for daughters probably a little less (at least at the median). The magnitude of these effects is striking given that only about one percent of our sample falls into this category. It should be noted that the declaration of marital status on the 1982 T1 form did not contain a separate category for living common-law. As a result we suspect, firstly, that some individuals living common-law and raising a family together probably indicated that they were married, even though this category was meant to refer to only those legally married when tax exemptions were being claimed. Second, those considered common-law in our data are in fact a residual group. They are those individuals not offering any marital information on their income tax returns but who were identified in the processing of the T1 data by Statistics Canada as living at the same address as a women with children.<sup>8</sup> In our view, it is possible that these individuals joined lone parent families at some point after the child's birth, in this sense the estimate is picking up the influence of family disruption earlier in the child's life. As such it is less of an indicator of the impact of common-law relationships than of family disruption and single motherhood. The correct interpretation of this variable is open to question. More specifically we do not wish to interpret it as a "common-law" effect in spite of the name given to it.

#### 4. Issues of Interpretation

There are two recurring themes in the empirical literature dealing with the attainments of children: the influence of unobserved factors, and the difficulty in establishing causal patterns. Haveman and Wolfe (1995), for example, offer an extensive review of the US literature and conclude by stressing these issues, which relate to omitted variables bias and endogeneity. The interpretation of our findings should, therefore, address questions about what variables are excluded from the regression models, and about what variables are included.

The influence of “first dollar” effects underscores the importance of omitted factors. These variables are collectively very important additions to the regression models discussed in Tables 5.3 and 5.4. They are not only statistically significant but also large in magnitude.<sup>9</sup>

In addition, these variables play an important role in determining the magnitudes and signs of some of the coefficients associated with the additional dollar effects. The coefficient estimates on parental income will be biased upward if other influences determining child outcomes are positively correlated with income and omitted from the model. In contrast to Hill and Duncan (1987), we find that different sources of the parental income have different influences on the adult incomes of children. For example, we can reject the restriction that the six sources of the father’s income have the same coefficient.<sup>10</sup> This suggests that more than money matters in determining the adult incomes of children, and might be interpreted as suggesting that the role models offered by parents are important.

This conclusion, however, is valid if the estimates are unbiased. The potential for an omitted variable bias is illustrated in Table 5.5. This table offers the coefficient estimates on the various income sources for a variety of model specifications. The least squares results from Tables 5.3 and 5.4 are presented in the last column of this table. Column [1] represents the simplest model, the only regressors in addition to the amount of income from the seven possible sources (six from the father plus the rest of family income) are the ages and ages squared of the father and child. The remaining columns are based on more complete models, adding successively controls for province of residence, neighbourhood characteristics (including the number of moves and the majority language), and

finally family structure. Column [4] therefore includes all of the regressors except the first dollar effects.

Consider the coefficients associated with the sources of income other than government transfers: namely earnings, self-employment income, asset income, other income, and rest-of-family income. While the simpler models in column [1] through [4] overstate the magnitude of these coefficients in comparison with column [5], and while the first dollar effects play an important role in this (particularly for self-employment income and other income), the results are robust. All of the coefficients in column [5] are within one standard error of those in column [1]. In fact, the major impact of the specification of the model has to do with the role of UI, the principal non-market source of income. Without the controls for first dollar effects the amount of UI benefits received by the father has a large negative influence on the market incomes of children: every \$1,000 increase in UI being associated with more than \$200 to almost \$300 decline in the child’s adult income. In contrast, the effect of UI income is not statistically different from zero when the first dollar effects are included in the model. The Family Allowance variable is not for the most part statistically significant from zero, but it is large in magnitude and changes a great deal as controls for the province of residence and number of siblings are added. Once these controls are introduced the first dollar effects increase the family allowance coefficient for sons (although it remains statistically insignificant), and decrease it for daughters.

How should the influence of first dollar effects be interpreted? It is difficult to suggest a causal mechanism at work in these patterns. While each income source may signal the effect of unobserved characteristics of the father that are passed on to the child, it is not clear what these are or how they operate. For example, it has been suggested that the self-employed may be more motivated and active in the market place, and it is this motivation that is either genetically or otherwise passed on to the children and determines their labour market success (Dunn and Holtz-Eakin, 1996). Similarly, those parents with assets might be viewed as having more foresight, or more ability to plan for the future, and these characteristics are important for labour market success. Further, while it may be argued that the intergenerational transmission of UI status is associated with characteristics that are detrimental to labour market success, the most likely

Table 5.5  
**Model Specification and the Sensitivity of the  
Relationship between Father and Child Incomes**

	[ 1 ]	[ 2 ]	[ 3 ]	[ 4 ]	[ 5 ]
<b>Sons</b>					
Additional Dollar Effects (per thousand dollars)					
Earnings	103.5	101.3	95.9	95.0	90.7
Self-Employment Income	93.3	92.7	85.3	85.6	76.2
Asset Income	30.4	30.9	31.1	29.5	27.7
Unemployment Insurance	-372.3	-351.1	-298.9	-287.8	-9.7
Family Allowance	-367	-90.8	-126.0	335.6	457.3
Other Income	74.7	74.0	67.1	66.4	54.1
Rest-of-Family Income	91.5	89.1	86.2	91.6	89.4
R <sup>2</sup> Adjusted	0.0330	0.0368	0.0385	0.0389	0.0418
<b>Daughters</b>					
Additional Dollar Effects (per thousand dollars)					
Earnings	55.0	55.0	49.6	49.0	47.2
Self-Employment Income	69.5	69.1	64.0	64.2	49.7
Asset Income	31.5	31.3	31.4	30.1	28.0
Unemployment Insurance	-301.2	-298.6	-217.6	-211.0	-22.8
Family Allowance	-214.2	-31.9	11.5	581.0	336.2
Other Income	69.5	71.6	64.7	64.5	55.3
Rest-of-Family Income	79.1	79.7	75.3	82.3	81.5
R <sup>2</sup> Adjusted	0.0377	0.0422	0.0471	0.0478	0.0530
<b>Other Variables Included in the Model</b>					
First Dollar Effects	no	no	no	no	yes
Age and Age Squared	yes	yes	yes	yes	yes
Province of Residence	no	yes	yes	yes	yes
Neighbourhood Characteristics	no	no	yes	yes	yes
Family Structure	no	no	no	yes	yes

**Note:** Table entries report the least squares regression coefficients using the income levels of sons and daughters (expressed in constant 1986 dollars) as the dependent variable. Results in column [5] are taken from tables 5.3 and 5.4.  
**Boldface** indicates significance at 0.05. **Boldface** and shading indicates significance at 0.01. The underlying standard errors are derived using White's heteroscedastic consistent covariance matrix estimator.

interpretation of the UI coefficients is that the first dollar effects capture the intergenerational transmission of occupations.

Mayer (1997) argues that the role of income in determining the outcomes of children has been overstated, and that more than money matters. Summarizing the thesis of her book she states:

In most cases, additional parental income does improve children's chances for success. But parental income is not as important to children's outcomes as many social scientists have thought. This is because the parental characteristics that

employers value and are willing to pay for, such as skills, diligence, honesty, good health, and reliability, also improve children's life chances, independent of their effect on parents' income. Children of parents with these attributes do well even when their parents do not have much income. (Mayer 1997, p.2).

She goes on to argue that some sources of income are less strongly correlated with unobserved parental characteristics than others, and the coefficient estimates on these offer a less biased estimate of the influence of income. In particular, she suggests that "other" income—



meaning all non-labour market income net of government transfers—may be interpreted in this way. Her definition of other income is closest to the combination of what we have called asset income, Family Allowance, and other income. (Family Allowance is included in this list because, in spite of it being a government transfer, it was a universal program and therefore not related to unobserved individual characteristics in the way that Income Assistance or UI may be.) In fact, our results reveal that asset and other income have the weakest correlations with the dependent variables. This would suggest, if Mayer's argument is correct and if our use of first-dollar effects is an imperfect control for unobservables, that the influence of earnings and self-employment income on the son's earnings is overstated in the least squares regression by a factor of two to three.<sup>11</sup> Furthermore, if we interpret the difference in the coefficients between sons and daughters as being due to role model influences (an important unobservable), then the father-daughter relationship is more likely to lead to less biased estimates. These arguments would imply that the most accurate estimate of the influence of parental income on childhood attainment is about a \$30 to \$50 increase in the child's income for every \$1,000 increase in the father's.

At the same time, however, it should be noted that our results may be biased in the opposite direction (that is they may be an understatement) because we measure parental income in a single year as opposed to averaging over several years. Transitory income fluctuations imply that single year measures are more likely to be imperfect measures of permanent income and to therefore understate the correlation between parent-child incomes. Our decision to use single year data from 1982 was based upon the fact that this was the earliest year in which some family characteristics were available. In particular, the number of siblings is not available before this year and the absence of this variable leads (as Table 5.5 illustrates) to a severe bias in the coefficient associated with income from Family Allowance. In order to examine the extent of the bias associated with this kind of measurement error, we re-estimated our models using averages of the father's income and its components between 1978 to 1982.<sup>12</sup> For sons the coefficients associated with earnings and self-employment are respectively about 70% and 63% higher; for daughters they are about 90% and 45% higher. However, the coefficient associated with asset income is only 9.7% higher for sons and actually

13% lower for daughters. Basing our conclusions on the coefficients on asset income in the original models is not, therefore, totally inappropriate.

The implication is that first dollar effects are much more influential than additional dollar effects. For example, suppose that \$50 per \$1,000 of father's income is the correct estimate, then on average (that is using the least squares findings) a father's income would have to be \$23,144 higher to compensate his son for the fact that he (the father) was not self-employed, \$28,838 higher to compensate for the fact that he collected UI, and \$62,138 higher to compensate for the fact that he reported no asset income. The corresponding figures for daughters are \$17,000, \$17,008, and \$53,960. The underlying characteristics associated with these first dollar effects, whatever they may be, are major influences on the attainments of children. Even if we assumed that the true value was as high as \$100 per \$1,000 this general conclusion would be the same.

The results associated with neighbourhood characteristics and family structure raise a related issue associated with the variables that should be included in our models. It is difficult to establish the causal mechanisms at work with the models we have estimated because some of the regressors may in fact be inter-related. The clearest examples of this are the neighbourhood characteristics. They are treated as exogenous in our model, but may well reflect choices by the parents: choices that are in turn based upon their incomes, their motivation, or their ability or desire to invest in the future prospects of their children. The interpretation of the controls for the number of moves is, as mentioned in Section 5.1, also subject to this limitation. Coleman's use of the concept of social capital certainly offers a theory for the interpretation of these effects, but it is possible that this variable is not exogenous, and is not accurately modelled in the single equation framework we have assumed. To cite one of several possibilities, lower income individuals may, for example, be those renting their homes, and renters may move more often. (Similar types of arguments can be made with respect to family structure. For example, see Manski et al., 1992.) However, the exclusion of neighbourhood and family structure variables from the estimating equation does not change the estimates obtained for the first dollar effects nor the additional dollar effects.<sup>13</sup>

## 5. Conclusion

The process determining the ultimate labour market success of children is complex and multifaceted and no doubt involves the family, the community, and the state. Certainly money matters for a child's prospects. Children from higher income households tend to do better as adults—sometimes much better—than children from lower income households. At the same time, however, factors other than money are also most surely at work. Indeed, it is easy to overstate the influence of money because a lot of other influences determine both the prospects of children and the income their parents earn. Parental income may reflect these other factors rather than play an independent causal role.

This, in fact, is the major theme of our research. One way to develop a sense of the independent role of money in determining the adult prospects of children is to examine the composition of income. If only money matters then a dollar from earnings, a dollar from self-employment, a dollar from assets, a dollar from government transfers, or a dollar from any other sources should all have the same impact on the ultimate labour market success of children. We find that this is not so. Our major result is that factors associated with the type of income fathers report—factors unobservable to us as analysts but presumably of value in the labour market—are major influences on the market income prospects of children. In particular, we find that the presence (as opposed to the amount) of asset income is very strongly correlated with the market incomes children will eventually earn as young adults. We also find that the presence of certain government transfers has a negative or neutral correlation with the adult earnings of children.

In general, our best estimate of the independent effect of money income suggests that for every \$1,000 increase in the father's income a child's income as an adult will be \$50 higher. This implies that someone raised by a father whose income was at the top 10% of the income distribution (about \$62,000 using constant 1986 dollars) would earn \$2,350 more than someone raised by a father whose income was at the bottom 10% of the income distribution (about \$15,000). In comparison, having a father who reported asset income is equivalent, all other things equal, to \$50,000 to \$60,000 more in earnings. But parents influence the prospects of their children not just by virtue of the money they earn; they also act as role models. We find that the role model effect is about as large as the pure

income effect. For example, following the existing literature we hypothesize that parents of the same gender as the child will be stronger role models: fathers having a greater influence on sons, and mothers a greater influence on daughters. We find that for every \$1,000 increase in a father's income the income of his daughter rises by about \$50, but for every \$1,000 increase in the income of other family members (the mother and any siblings) the daughter's income will be about \$80 higher. The case for sons, however, is not as clear: income from the father and from other family members has about the same impact on their adult income.

The future prospects of children, however, also have a community dimension. Teenagers raised in higher income neighbourhoods tend to be more successful, and teenagers whose father did not move also tend to have a significant advantage over those whose father moved more than once. This being said it is, nonetheless, difficult to establish an accurate estimate of the influence of neighbourhoods on children. Neighbourhood and mobility decisions may be influenced by unobserved characteristics that are also important influences for the prospects of children, and residential choices may be a reflection of these underlying causal factors, rather than independent influences.

This, however, returns us to our principal theme and underscores the complex nature of the process determining the ultimate labour market experiences of children. If a policy geared toward transferring more income to children is to be evaluated in terms of its long-term impact on their self-sufficiency in the labour market, then it should be understood that this process is complex and that while it is influenced by the economic resources available to the parents, other factors play a role—quite possibly a central role.

## Appendix

We link the income tax records of fathers and their children by using the T1 Family File (T1FF), a dataset of T1 records that has been processed by Statistics Canada in a way that matches members of each tax filer's family. (T1 forms are the main annual tax returns filed by individuals in Canada, and the T1FF incorporates the universe of tax filers.) A variety of matching strategies is employed to identify family members, and imputation processes are used to add non-tax filing members of the family and to complete missing information. Couples (including spouses and



common-law couples) are linked using SIN codes and spousal SIN codes when indicated on the T1, as well as name and address information. Children are matched to their parents using name and address fields. Harris and Lucaciu (1994) offer more detail on the construction of the T1FF.

Father-child pairs are drawn from the T1FF for 1982. Only non-imputed fathers and children are retained. (The father may not be the biological father, but rather should be thought of as the male household head.) Children are restricted to having been born between 1963 and 1966. Three classes of children are excluded: [1] those children not filing an income tax return while still at home; [2] those who filed a tax return and were linked to a family that had no father; and [3] those who filed a tax return but were not linked to a family. Using these father-child pairs of SINs we obtain income information from the fathers' 1982 T1 forms, and the children's 1994 T1.

Since data collected for taxation purposes changes from year to year with tax law and administrative need, it is necessary to deal with those changes that may affect the comparability of father and child incomes over the period we are studying. The most important of these involves the fact that fathers were able to take advantage of Employment Expense Deductions that were not available to their adult children a decade or so later. We correct fathers' income for this. Other changes influenced the comparability of capital gains and dividend income. A capital gain or loss occurs when there is a disposition of capital property. A fraction of capital gains is taxed as income. In 1982, one-half of net capital gains was taxable, while in 1994 three-quarters were taxable. The taxable portion of capital gains appears on the T1 file. We re-adjust these figures to reflect the full net capital gain. Finally, dividends from some Canadian corporations are subject to a "gross up" factor. In 1982, dividends received from Canadian corporations dealt with at arms length were multiplied by a factor of 1.5 (a 50% gross up factor) to obtain the taxable amount of the dividend. On the T1 file, the amount of dividends subject to this gross up factor is not separable from the rest of Canadian dividends. By 1994, dividends from all Canadian corporations were taxable subject to a gross up factor of 25%. Since we cannot treat this variable consistently over time we do not attempt to "gross down" dividends.

Two measures of income are created. The first is before tax "Total Market Income." This includes Income from Earnings, Allowable

Expenses from Earnings, Income from Self-Employment, Income from Assets, and Other Income. The second measure is "Total Income," defined as Total Market Income plus any taxable government transfers. One major drawback of this measure, however, is the absence of information on Income Assistance for the fathers, which is non-taxable and hence not reported. Worker's compensation payments also fall into this category. Income Assistance is, however, available for the sons in 1994. The introduction of the Goods and Services Tax (GST) credits in 1992 raised the likelihood that an income tax return would be filed by low income individuals, and as a part of this Income Assistance benefits began to be captured in a significant way. (Applicants for the GST credit are required to claim Income Assistance benefits.) The other source of income from government transfers is Family Allowance. This was a universal program run by the federal government that provided monthly financial assistance to parents or guardians of dependent children. A parent or guardian who wholly or substantially maintained a dependent child (one with no taxable income) under the age of 18 received Family Allowance benefits. Provinces were permitted to vary the amount of benefits based on the age and or number of children in the family as long as the minimum payment was not less than 60% of regular benefits and the average payment was equal to the federal payment. In 1982, Family Allowance benefits had to be reported as income by the person who claimed a personal exemption for the child, usually the individual with higher income. If no personal exemption was claimed, then payments were judged to be the income of the cheque recipient, usually the mother. Optionally, income from family allowance could be split between two spouses.

All income information is measured in 1986 dollars, using the country wide Consumer Price Index as the deflator. In the regression analysis the father's income components are measured in thousands of dollars, and the ages of fathers and children are measured in years as deviations from sample means.

A "neighbourhood" is defined on the basis of the Forward Sortation Area (FSA), the first three digits of the Postal Code. (An alternative would be to draw this sort of information from the Census of Population for 1981 and link it to our sample. This is an avenue for our future work because of the need to associate Census Tract information to postal codes or some derivative of them.) We use all the income tax records filed



by Canadians in 1982 to derive a host of neighbourhood characteristics. This is the first year in which the appearance of postal codes on the income tax forms becomes almost universal: between 1978 and 1981 about 10% of income tax returns did not have a postal code; in 1982 this fell to only 1%. We did derive neighbourhood information averaged over the 1978-82 period, and in fact this was not much different (globally) than the version relying solely on 1982 data. As such the neighbourhood characteristics ascribed to the father-son pair in our sample are those for 1982. The neighbourhood variables we derive are the median income in the FSA, the standard deviation of the income, the fraction of income tax filers receiving self-employment income, and the fraction reporting UI benefits. We also derived and experimented with the following variables: the fraction of filers with income below 50 percent of the median Canadian income; the fraction with income above 50 percent of the Canadian median; and total UI benefits as a fraction of total earnings in the FSA.

As mentioned in the text, we derive a measure of "Social Capital" by relying on Coleman's idea that it can be proxied (inversely) by the number of moves the child has experienced. The number of moves the father made between 1978 and 1982 is determined by comparing postal codes on successive income tax returns filed between these years. In the event that the postal code was missing for one or more years between 1978 and 1982 we assumed that no move took place in that year. As such only observed moves are counted. It is possible that this slightly understates the number of individuals moving more than once. This affected about 13% of our sample, that is to say 87% had complete postal code information.

We use the language in which the income tax return was filed to derive an indicator of whether the return was filed in the majority language in the province of residence or not. Obviously many individuals speak neither official language and may have their income tax return completed for them by someone else. This variable, therefore, should not be interpreted as the language spoken in the home. The T1FF also contains an indicator of the number of children in the household and the total family income. One might think it possible to derive a measure of the number of years of post-secondary education undertaken by the child from information on the tuition deduction. In fact, it is very difficult to do this reliably and ascribe it to a particular individual because the father (or for that matter the mother,

spouse, spouse's father, spouse's mother, and even the grandparents) may claim these deductions, and he may do so for any one of his children attending a post-secondary institution. Further, such deductions are permitted for a wide variety of training/educational institutions, not just community colleges or universities.

The sample was restricted in two ways for the purpose of the regression analysis. First, we consider only those individuals whose father lived in an "urban" community in 1982. Urban is defined on the basis of the second digit of the FSA. When zero this relates to a rural area that is often very broad geographically. While an analysis of these areas is important, it is unlikely that they correspond to what we might call for analytical purposes a "neighbourhood." We also deleted all communities with less than 25 tax filers, so that the neighbourhoods captured in our sample vary in size from 25 filers to 33,026. (We did perform our regressions using the "rural" data set and a data set containing both urban and rural. These "rural" neighbourhoods vary in size from 155 to 74,972. We also excluded the observations in our sample from the H0M Forward Sortation Area (St. Regis), because of concerns over some of the income information. The complete results are available from the authors.)

Second, in preliminary analyses we noticed that some individuals reported very large negative values for asset and self-employment income. These were often offset by very large positive values of another income source, suggesting that the composition of income was being influenced by tax concerns. We remove only influential observations with negative self-employment or asset income. Following Belsley, Kuhn, and Welsch (1980), if  $\mathbf{X}$  is the matrix containing all observations on the regressors, we compute a leverage value  $h_{ii} = \mathbf{x}_i'(\mathbf{X}'\mathbf{X})^{-1}\mathbf{x}_i$  for each observation and define an influential observation as one for which  $h_{ii} > 2K/N$ , where  $K$  is the number of regressors and  $N$  is the sample size. This has the indirect effect of removing a number of observations with large positive amounts of other income sources. In the case of sons 1,435 observations were deleted from 159,996; for daughters 1,117 from 127,890. The results associated with the full sample are available from the authors.

The complete sets of descriptive statistics associated with the variables used in the multivariate regression analysis are presented in Table 5A.1 for sons, and in Table 5A.2 for daughters. The decile transition matrices relating the sons'

Table 5A.1  
Descriptive Statistics: Sons

	Average	Standard Deviation	Minimum	Percentile					
				10 <sup>th</sup>	25 <sup>th</sup>	50 <sup>th</sup>	75 <sup>th</sup>	90 <sup>th</sup>	Maximum
Number of Observations = 158,561									
Child's Total Income (1994)	27,416	26,303	-361,424	6,842	15,995	25,611	34,920	44,509	2,805,413
Child's Total Market Income (1994)	26,626	26,640	-361,424	4,926	14,234	25,094	34,724	44,402	2,805,413
First Dollar Effects									
Earnings	0.90								
Self-Employment Income	0.14								
Asset Income	0.74								
Unemployment Insurance	0.16								
Family Allowance	0.75								
Other Income	0.32								
Additional Dollar Effects									
Father's Total Income (1982)	39,273	47,641	-103,617	15,123	24,424	33,807	45,429	61,521	6,255,197
Earnings	30,999	30,890	0	1	18,495	29,723	40,300	52,839	4,491,201
Self-Employment Income	1,866	11,892	-72,114	0	0	0	0	124	730,464
Asset Income	3,932	29,823	-138,690	0	0	416	1,882	7,037	5,094,263
Unemployment Insurance	492	1,549	0	0	0	0	0	1,421	12,056
Family Allowance	461	482	0	0	0	385	771	1,145	3,153
Other Income	1,524	7,740	-27,373	0	0	0	459	3,239	960,416
Neighbourhood Effects									
Median Income	18,908	2,866	9,887	15,308	16,912	18,816	20,588	22,460	42,939
Standard Deviation	25,011	23,349	9,761	14,151	16,315	19,469	25,565	36,411	479,435
Fraction of Self-Employed	7.77	3.08	0	5	6	7	9	11	33
Fraction of UI Recipients	20.10	6.73	4	12	15	20	25	29	47
Moved Once	0.17								
Moved Twice	0.04								
Moved Three Times	0.01								
Province									
Newfoundland	0.01								
Nova Scotia	0.03								
Prince Edward Island	0.00								
New Brunswick	0.02								
Quebec	0.22								
Ontario	0.42								
Manitoba	0.05								
Saskatchewan	0.04								
Alberta	0.10								
British Columbia	0.11								
Yukon and Northwest Territories	0.00								
Individual/Family Characteristics									
Majority Language	0.96								
Number of Children	2.66	1	1	1	2	2	3	4	14
Rest-of-Family Income	18,334	22,797	-86,267	0	5,075	14,800	25,917	39,272	3,263,450
Married, Wife Worked	0.83								
Single	0.03								
Common-Law	0.01								
Father's Age	47	6.34	28	39	42	46	51	55	72
Child's Age	30	0.94	28	29	29	30	31	31	31

Table 5A.2  
**Descriptive Statistics: Daughters**

	Average	Standard Deviation	Minimum	Percentile					Maximum
				10 <sup>th</sup>	25 <sup>th</sup>	50 <sup>th</sup>	75 <sup>th</sup>	90 <sup>th</sup>	
Number of Observations = 126,773									
Child's Total Income (1994)	18,861	16,690	-79,825	567	7,930	18,016	26,501	34,754	875,209
Child's Total Market Income in 1994	17,856	16,882	-79,825	154	6,091	16,660	25,784	34,392	875,209
First Dollar Effects									
Earnings	0.90								
Self-Employment Income	0.15								
Asset Income	0.76								
Unemployment Insurance	0.15								
Family Allowance	0.75								
Other Income	0.32								
Additional Dollar Effects									
Father's Total Income (1982)	39,597	46,711	-106,405	15,334	24,763	34,191	45,921	62,275	5,029,906
Earnings	31,057	30,452	0	0	18,524	30,029	40,628	53,315	3,887,265
Self-Employment Income	2,050	12,892	-141,826	0	0	0	0	427	600,085
Asset Income	3,998	30,498	-220,820	0	0	467	1,981	7,066	4,808,750
Unemployment Insurance	466	1,515	0	0	0	0	0	1,254	12,194
Family Allowance	453	479	0	0	1	385	771	1,124	3,153
Other Income	1,573	7,290	-289	0	0	0	466	3,441	604,142
Neighbourhood Effects									
Median Income	18,962	2,852	9,884	15,460	16,977	18,856	20,692	22,464	42,939
Standard Deviation	25,252	22,863	9,423	14,165	16,405	19,698	25,960	36,704	479,435
Fraction of Self-Employed	7.77	3.05	1	5	6	7	9	11	33
Fraction of UI Recipients	19.78	6.64	4	12	15	19	24	28	47
Moved Once	0.16								
Moved Twice	0.04								
Moved Three Times	0.01								
Province									
Newfoundland	0.01								
Nova Scotia	0.03								
Prince Edward Island	0.00								
New Brunswick	0.02								
Quebec	0.20								
Ontario	0.43								
Manitoba	0.05								
Saskatchewan	0.04								
Alberta	0.10								
British Columbia	0.11								
Yukon and Northwest Territories	0.00								
Individual/Family Characteristics									
Majority Language	0.96								
Number of Children	2.69	1.26	1	1	2	3	3	4	15
Rest-of-Family Income	19,063	20,264	-59,423	0	6,068	15,717	26,841	40,389	1,536,952
Married, Wife Worked	0.84								
Single	0.02								
Common-Law	0.01								
Father's Age	47	6.35	28	39	42	46	51	56	72
Child's Age	30	0.92	28	29	30	30	31	31	31



Table 5A.3  
Decile Transition Matrices for Sons and Daughters

		Son's Total Market Income Decile									
		Bottom	2	3	4	5	6	7	8	9	Top
Father's Total Income Decile	Bottom	14.5	13.6	12.7	11.3	10.2	9.1	8.4	7.4	6.8	6.0
	2	12.4	12.3	11.9	12.3	11.0	9.9	8.7	8.6	7.0	5.9
	3	11.4	11.2	11.3	11.5	11.1	10.4	9.5	8.7	8.3	6.7
	4	10.7	10.1	10.5	10.9	11.0	10.9	10.6	9.7	8.4	7.2
	5	9.8	9.5	10.1	10.5	11.0	11.1	10.6	10.0	9.5	7.8
	6	9.3	9.7	9.9	9.5	10.0	10.5	11.1	10.4	10.5	9.0
	7	9.0	8.9	9.1	9.8	9.8	10.3	10.8	11.2	11.5	9.6
	8	8.4	8.3	8.6	8.5	9.5	10.4	10.5	11.5	12.8	11.5
	9	7.7	8.6	8.2	8.4	8.8	9.2	10.3	11.8	12.8	14.2
	Top	6.9	7.8	7.5	7.4	7.4	8.1	9.5	10.7	12.5	22.1

		Daughter's Total Market Income Decile									
		Bottom	2	3	4	5	6	7	8	9	Top
Father's Total Income Decile	Bottom	13.6	11.4	11.6	11.1	11.0	9.7	9.1	8.5	7.7	6.4
	2	12.1	10.9	10.6	10.9	10.7	11.3	10.2	8.7	8.5	6.2
	3	11.6	10.4	10.7	10.8	10.8	10.8	10.4	9.6	8.3	6.7
	4	10.6	10.3	10.0	10.7	10.8	10.8	10.0	10.4	9.0	7.4
	5	10.5	10.2	10.4	9.9	10.3	10.3	10.7	10.4	9.5	7.6
	6	9.7	9.7	10.3	10.2	10.0	10.1	10.5	10.7	10.3	8.5
	7	9.5	10.2	9.8	10.0	9.8	9.6	10.0	10.8	10.2	10.1
	8	8.7	9.7	9.6	9.2	9.1	9.9	9.9	10.7	11.7	11.5
	9	7.4	8.9	8.8	9.0	9.4	9.5	9.8	10.2	12.4	14.5
	Top	6.2	8.3	8.2	8.4	8.0	8.0	9.3	10.0	12.5	21.1

**Note:** Incomes have been age adjusted as described in the appendix.

**Source:** Calculations by authors from Canadian administrative data, Statistics Canada.

market income to the fathers' total income are presented in Table 5A.3. The data used in these tables are corrected for age differences between the fathers and the children by using the residuals from the regression  $Y_i = \gamma_0 + \gamma_1 \text{Age}_i + \gamma_2 \text{Age}_i^2$ , where  $i$  represents either a father or a child, and where  $Y$  is the 1994 level of total market income for the child, and the 1982 level of total income for the father. All income measures are expressed in 1986 dollars.

## Notes

Earlier versions of this paper were presented to seminars at Statistics Canada, the University of Göteborg, and Stockholm University, as well as to the 1997 meetings of the American Sociological Association, the 1997 meetings of the Society for the Advancement of Socio-Economics, and the "Intergenerational Equity in Canada" conference held at Statistics Canada in February, 1997. We would like to thank Ronald Brieger, Nicole Fortin, John Myles, and David Zimmerman

for helpful comments, while at the same time noting that the responsibility for the contents of the paper remain solely with the authors, and in particular should not be attributed to Statistics Canada.

<sup>1</sup> Measuring  $Y$  as the natural logarithm of income Corak and Heisz (1995, 1998) and Fortin and Lefebvre (chapter 4) obtain a correlation of 0.2. Solon (1992) and Zimmerman (1992) suggest that this correlation could be as high as 0.4 or even 0.5 in the United States, although this has come under some question. See Shea (1996), and Couch and Dunne (1997).

<sup>2</sup> Brooks-Gunn, Duncan, Kato Klebanov, and Sealant (1993), Corcoran, Gordon, Laren and Solon (1992), Cooper, Durlauf, Johnson (1993) and Wilson (1996, 1987) are only a few examples of a long literature in the United States.

<sup>3</sup> Coleman also suggests that the number of siblings is an indication of the amount of social capital available to a child within the family. Here he is referring essentially to the amount of time parents have to spend with a child. In a

- similar vein a household in which both parents work or which is headed by a single parent will be characterized by less social capital. This suggests that the labour market outcomes of children will be negatively associated with the number of children, and with single parenthood or a dual-earner household. These predictions, however, are also consistent with Becker's model.
- <sup>4</sup> The Family Allowance was a universal demogrant based upon the number of children. It was paid to the mother, but had to be reported for income tax purposes by the individual in the family with the highest income. During our period of analysis the Family Allowance amounted to about \$300 per year per child (in 1986 dollars). It was replaced by the Child Tax Credit in 1993. "Other income" is a catch all that includes, among other things, private pension income, alimony payments, RRSP income, income from a limited partnership or any other type of taxable income not reported elsewhere.
- <sup>5</sup> These data are adjusted for age differences between the child and parent, and are based upon the total market income of the child and the total income of the father. See the appendix for more details.
- <sup>6</sup> The standard errors associated with the least squares results are robust to heteroscedasticity, being based on White's heteroscedastic covariance matrix estimator. The standard errors of the quantile regressions are obtained by a bootstrap using 20 replications, the 10<sup>th</sup> and 90<sup>th</sup> quantiles being estimated jointly.
- <sup>7</sup> It should be underscored that what is being measured by this indicator variable is whether or not the mother filed an income tax return, not simply whether or not she worked, and certainly not the amount of income she contributed to the family. (This latter influence would be captured by the family income variable.) That being said it should also be noted that the mothers likely file if their income is above the taxable threshold. As such this variable indicates more than just a passing attachment to the labour market.
- <sup>8</sup> To be classified as "common-law" the individual could not have had the same last name as the women, and must have been within 15 years of her age (Harris and Lucaci 1994).
- <sup>9</sup> For example, a test of the null hypothesis that they be excluded from the least squares models can be strongly rejected:  $F(6, 158521)=82$  for men, and  $F(6, 126743)=118$  for women.
- <sup>10</sup> The F-statistics for sons and daughters are, respectively  $F(5, 158521)=57.7$  and  $F(5, 126733)=16.1$ , the critical value at 0.01 is 3.02.
- <sup>11</sup> Recall, however, that in Table 5.3 the coefficient estimate for self-employment income from quantile regression at the median is 48.6, substantially below the least squares result.
- <sup>12</sup> The indicators for the first dollar effects were defined as taking a value of one if income from a particular source was received in any one year between 1978 and 1982. We estimated each of the models in Table 5.5. When used the number of siblings was set to the 1982 value.
- <sup>13</sup> These results are available from the authors. The sole exception is the impact of the number of siblings on the Family Allowance variable. As mentioned, this is due to the fact that the Family Allowance was not measured on a per child basis.

## Bibliography

- AARONSON, Daniel (1996). "Using Sibling Data to Estimate the Impact of Neighborhoods on Children's Educational Outcomes." Federal Reserve Bank of Chicago, unpublished.
- BECKER, Gary S. (1991). *A Treatise on the Family*. Enlarged Edition. Cambridge Massachusetts: Harvard University Press.
- BECKER, Gary S. and Nigel TOMES (1986). "Human Capital and the Rise and Fall of Families." *Journal of Labor Economics*. Vol. 4 Part 2, S1-S39.
- BELSLEY, D., E. KUHN and R. WELSCH (1980). *Regression Diagnostics*. New York: John Wiley and Sons.
- BJÖRKLUND, Anders and Markus JÄNTTI (1997). "Intergenerational Mobility of Economic Status: Is the United States Different?" Paper Presented to the Annual Meetings of the American Economic Association, New Orleans.
- BROOKS-GUNN, Jeanne, Greg J. DUNCAN, Pamela KATO KLEBANOV and Naomi SEALAND (1993). "Do Neighborhoods Influence Child and Adolescent Development?" *American Journal of Sociology*. Vol. 99, 353-95.
- COLEMAN, James S. (1988). "Social Capital in the Creation of Human Capital." *American Journal of Sociology*. Vol. 94 Supplement, S95-S120.

- COOPER, Suzanne J., Steven N. DURLAUF and Paul A. JOHNSON (1993). "On the Evolution of Economic Status Across Generations." Paper Presented to the Annual Meetings of the American Statistical Association, San Francisco California.
- CORAK, Miles and Andrew HEISZ (1998). "The Intergenerational Earnings and Income Mobility of Canadian Men: Evidence from Longitudinal Income Tax Data." Ottawa: Statistics Canada, Analytical Studies Branch Research Paper No. 113.
- CORAK, Miles and Andrew HEISZ (1995). "The Intergenerational Income Mobility of Canadian Men." *Canadian Business Economics*. Vol. 14, 59-69.
- CORCORAN, Mary, Roger GORDON, Deborah LAREN and Gary SOLON (1992). "The Association Between Men's Economic Status and their Family and Community Origins." *Journal of Human Resources*. Vol. 27, 575-601.
- COUCH, Kenneth A. and Thomas A. DUNNE (1997). "Intergenerational Correlations in Labor Market Status: A Comparison of the United States and Germany." *Journal of Human Resources*. Vol. 32, 210-32.
- DUNN, Thomas and Douglas HOLTZ-EAKIN (1996). "Financial Capital, Human Capital, and the Transition to Self-Employment: Evidence from Intergenerational Links." NBER Working Paper 5622.
- GOTTSCHALK, Peter (1990). "AFDC Participation Across Generations." *American Economic Review*. Vol. 80, 367-71.
- HARRIS, Shelly and Daniela LUCACIU (1994). "An Overview of the T1FF Creation." LAD Reports, Reference Number 94-24-01 v1.2. Ottawa: Statistics Canada, Small Area and Administrative Data Division.
- HAVEMAN, Robert and Barbara WOLFE (1995). "The Determinants of Children's Attainments: A Review of Methods and Findings." *Journal of Economic Literature*. Vol. 23, 1829-78.
- HILL, Martha S. and Greg J. DUNCAN (1987). "Parental Family Income and the Socioeconomic Attainment of Children." *Social Science Research*. Vol. 16, 39-73.
- JENCKS, Christopher (1992). *Rethinking Social Policy: Race, Poverty, and the Underclass*. New York: Basic Books.
- LEVINE, Phillip B. and David J. ZIMMERMAN (1996). "The Intergenerational Correlation in AFDC Participation: Welfare Trap or Poverty Trap?" Institute for Research on Poverty. Discussion Paper No. 1100-96.
- MANSKI, Charles F., Gary D. SANDEFUR, Sara McLANAHAN and Daniel POWERS (1992). "Alternative Estimates of the Effect of Family Structure During Adolescence on High School Graduation." *Journal of the American Statistical Association*. Vol. 87, 25-37.
- MAYER, Susan E. (1997). *What Money Can't Buy: Family Income and Children's Life Chances*. Cambridge: Harvard University Press.
- McLANAHAN, Sara and Gary SANDEFUR (1994). *Growing up with a Single Parent: What Hurts, What Helps*. Cambridge, Massachusetts: Harvard University Press.
- SHEA, John (1996). "Does (Parents') Money Matter?" Unpublished Mimeo. Department of Economics, University of Wisconsin.
- SOLON, Gary (1992). "Intergenerational Income Mobility in the United States." *American Economic Review*. Vol. 82, 393-408.
- SOLON, Gary, Mary CORCORAN, Roger GORDON and Deborah LAREN (1991). "A Longitudinal Analysis of Sibling Correlations in Economic Status." *Journal of Human Resources*. Vol. 26, 509-33.
- SOLON, Gary, Mary CORCORAN, Roger GORDON and Deborah LAREN (1988). "Sibling and Intergenerational Correlations in Welfare Program Participation." *Journal of Human Resources*. Vol. 23,
- WILSON, William Julius (1996). *When Work Disappears: The World of the New Urban Poor*. New York: Random House.
- WILSON, William Julius (1987). *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. Chicago: University of Chicago Press.
- ZIMMERMAN, David J. (1992). "Regression Toward Mediocrity in Economic Stature." *American Economic Review*. Vol. 82, 409-29.





## Chapter 6

# The Impact of Family Disruption in Childhood on Demographic Outcomes in Young Adulthood

CÉLINE LE BOURDAIS AND NICOLE MARCIL-GRATTON

---

“Intergenerational Equity” has at its core the notion of an equilibrium in the economic contributions made by a given generation to preceding or subsequent generations. However, the transmission of economic well-being may well be mediated by the transfer of social characteristics and behaviour from one generation to the next. Family life trajectories clearly fall into this pattern, and the way in which the cycle of poverty is reproduced in adult life is an important example. The reproduction of poverty may very well result from the social behaviour of children as they attain adulthood and become parents. Consequently, we focus in this chapter on the impact that family life disruption has on the transition to family life in adulthood for the first generations of Canadian children experiencing parental divorce in significant proportions.

Divorce, particularly since the legislative changes introduced in 1968, has become a fact of life for a growing number of Canadian families. In fact, if today’s conditions were to persist, about 40% of all marriages will end in divorce (Dumas and Péron 1992). Marriage seems in itself to have become less popular. The majority of young Canadians now start their conjugal life by cohabitation (Le Bourdais and Marcil-Gratton 1996). Cohabitation remains a less stable environment than marriage, and studies have shown that children born to cohabiting parents are more likely to experience parental disruption during their childhood (Marcil-Gratton 1993). Is cohabitation likely to remain primarily a form of trial marriage, one in which young people test their compatibility before entering into a long-term commitment? Or is it becoming a more permanent choice for couples to start a family? The answer differs from one corner of the country to the other. For example, in Quebec statistics for 1994 show that almost half (48.5%) of all births are to unwed mothers (Duchesne 1996). In the vast majority of cases these babies are in fact

born to cohabiting couples. Thus, the frequency of divorce may not give a complete picture of the impact of family disruption among the generations of children born in the 1990’s; their story is still to be told.

Examining the trajectories of the first generations of children who have experienced parental divorce or separation during childhood may nonetheless shed some light on their future. We find that family instability during childhood appears to be associated with the way in which children start their life as couples and parents. More precisely, parental separation or divorce tends to be positively related to the likelihood that offspring will experience cohabitation while decreasing the chances of directly marrying. It also tends to be related to early, pre-union or premarital childbearing among young women, and to increases in the risk of union dissolution, at least for married men.

### 1. Emerging Issues

Now that the “children of divorce” are reaching the age of forming couples and having children, do their conjugal and parental lives differ from those of children whose family environment has remained stable throughout their childhood and adolescence? Without necessarily establishing a direct causal link between family disruption in childhood and attitudes and behaviour towards family life, can we at least observe significant associations between these two sets of variables?

For quite a long time, these questions have been at the core of many studies conducted in the field of psychology and behavioral sciences (Wallerstein 1991). These studies, which were mostly based upon clinical observations, aimed first at measuring immediate consequences of instability on child development (such as the

impact of family disruption on self-esteem, or on social adjustment and educational attainment), but as time passed their focus shifted towards longer-term effects.

In the social sciences, and particularly in demography, the interest in studying the impact of parental separation on children is far more recent. Except perhaps for British researchers, who began exploring this question with the 1958 cohort longitudinal follow-up surveys known as the National Child Development Study, it was not until the beginnings of the 1980s before sociologists and demographers started analyzing this process among representative samples of children.

Blau and Duncan (1967) introduced the notion of the transmission of social characteristics across generations by showing how children whose parents had a low score on a socio-economic scale tended to reproduce the same pattern of achievement and to attain a similar status level. Following the same kind of approach, McLanahan (1985) showed that the reproduction of poverty across generations could clearly be associated with the experience of children living in a single-parent family headed by the mother. In so doing she was one of the first researchers to directly link socio-economic attainment with family life indicators.

During the mid-1980s new demographic variables were introduced into the analysis, particularly in the United States where richer data were available. McLanahan and Bumpass (1988) and Thornton (1991) studied the links between the family life courses of parents and the way in which their children started their own life as couples and parents.

Research bloomed during the 1990s. Furstenberg, Hoffman and Shresta (1995), Cherlin, Kiernan and Chase-Landale (1995), Axinn and Thornton (1996), and more specifically Amato (1996) all developed ingenious ways of extending the analysis. Although adequate data is still lacking in quite a few instances, there is now mounting evidence that parental divorce (or separation) is associated not only with an increased risk of offspring divorce, but also with several other types of behaviour.

More specifically, recent research shows that children who have experienced parental separation/divorce:

- [1] tend to leave home earlier and to do so for more negative reasons, such as conflict and

friction, than do those whose parents have stayed together (Goldscheider and Goldscheider 1989, Kiernan 1992, Cherlin et al. 1995, Mitchell et al. 1989, Young 1987)

- [2] engage in earlier and more frequent premarital sexual activity (Thornton and Camburn 1987, McLanahan and Bumpass 1988, Gabardi and Rosén 1992)
- [3] are more likely to first cohabit rather than marry (Kiernan 1992, Cherlin et al. 1995, Thornton 1991, Furstenberg and Teitler 1994)
- [4] if they do marry, girls with separated/divorced parents tend to do so earlier than others (Mueller and Pope 1977, Glenn and Kramer 1987), and early marriage also appears to be associated with the remarriage of the girl's parents (Goldscheider and Goldscheider 1989, Kiernan 1992, Thornton 1991, Keith and Findlay 1988) and has been shown to be linked to mothers marrying young and being pregnant at marriage
- [5] whether or not girls replicate their own mother's behaviour, they tend to have their first child earlier and more often out-of-wedlock than those whose parents stayed together
- [6] finally, youth with divorced/separated parents eventually face greater risks of conjugal break-up than those from stable families, and experience a shorter union duration (Gee 1992, McLanahan and Bumpass 1988, Keith and Findlay 1988, Webster et al. 1995).

Various explanations have been advanced to account for the way in which the inter-generational transfer of conjugal and parental behaviour operates, one of them focusing upon a socio-economic perspective. Most observers agree that socio-economic attainment has an overall effect on the transmission of family behaviour. For example, since single mothers and their children often experience economic hardship, offspring from divorced families may well achieve less education, earn lower income and hold lower status jobs. As such, low-economic status will further be associated with marital conflict and a greater risk of divorce, even though it is not always clear whether family history or low socio-economic status is the determining factor.

Obviously, all these effects are not independent of one another: early age at marriage is often in itself a good predictor of marital dissolution, whether or not family disruption was part of the environment of the child. Several authors have



thus recognized the need to introduce intermediate variables to account for the transmission of divorce across generations. In particular, Amato (1993) discusses the potential impact of interparental conflict upon children's attitudes towards marriage and divorce, which will in turn influence their family related behaviour. Amato (1996) also identifies the ability to develop quality intimate relationships, which may depend to a great extent on the quality of the parents' relationship and the model that was offered to their offspring while they were growing up. Amato does, however, recommend caution towards analyses that would single out only one factor as being responsible for the negative outcomes observed in children. He suggests developing a more general model, one that incorporates several variables that can be conceived as resources or stressors, minimizing or exacerbating the potential effects of parental divorce on child outcomes.

Relatively few analyses of the intergenerational impact of parental divorce have been conducted in Canada in large part due to a lack of appropriate data, at least before the General Social Survey (GSS) conducted in 1990. Mitchell, Wister and Burch (1989) and Gee (1992) have done some pioneering work in the field, with the former analyzing the conditions and timing of the process of leaving home for children according to their parents' conjugal history, and the latter studying the impact childhood family structure exerts on various offspring outcomes, such as religious observance, educational attainment, and socio-economic status.

## 2. The Available Data

To address the intergenerational transmission of family behaviour, one has to rely on survey data. Longitudinal surveys following children from birth to adulthood and taking into account all the events or the qualitative variables that modify their family environment as they grow older are the ideal source. These types of surveys allow an assessment of the influence that each of the factors being considered has on child behaviour when leaving home, starting conjugal life, and becoming parents. As mentioned the British National Child Development Study has adopted a longitudinal prospective, and the Canadian National Longitudinal Survey of Children and Youth is now pursuing a similar path.

Longitudinal panel data, however, present one great disadvantage: they are very time consuming to develop. Children must reach the age

of leaving home and starting their own autonomous family before analysis can begin. Such an approach presents the risk that the data will reflect the time-specific conditions in which the children grew up and might be out of date by the time the data are available for analysis. The British Study more or less faces this problem with the 1958 cohort, for which family disruption often meant the death of one's parent rather than divorce.

More frequently, longitudinal data are collected retrospectively, as in the case of Statistics Canada's General Social Surveys. These data have certain limits, mainly due to the fact that the focus is inevitably on only one generation of family members. The first decision researchers must make is whether the respondent is to be considered as belonging to the parental generation or to the offspring generation. Both the 1984 Family History Survey (FHS) and the 1990 General Social Survey (GSS) provide the respondent's complete marital and parental histories. Since the 1984 FHS contains no information on the marital situation of the parents of respondents, the latter had to be considered as belonging to the parental generation. As no data were collected on the family trajectory of respondents' children once they left home, analysts can only examine the impact of parental disruption on children's age at leaving home (Mitchell et al. 1989).<sup>1</sup>

While the 1986 GSS cycle did not focus on family issues, it did collect information on whether or not the parents of respondents were separated when they were 15 years old. However, no information was gathered on respondents' marital behaviour other than their status at time of survey. Gee (1992) thus proceeded to analyze the impact that parental separation exerts on respondents' education, income, religious observance, socio-economic status, and "satisfaction with several life domains." The most serious draw-back of her study is that the time lag between the respondents' 15<sup>th</sup> birthday and the survey varies greatly among respondents; the "outcome" variables, which all measured current status at the time of the survey, might thus differ greatly from those observed when the respondents were 15. For example, being "currently married" does not reveal whether the respondent was in the midst of a first marriage or a remarriage; nor does it indicate the age at which the marriage occurred. Finally, the family status at age 15, no matter how close it was to the child's experience, does not reflect the family transitions

that the respondent might have experienced as a youngster.

The 1990 GSS, the basis for our analysis, does not provide any better information than the earlier surveys as far as the family experience of the respondent as a child is concerned. But it constitutes a definite improvement in that the respondent's own marital history is available, and that links can be established with the marital status of the respondent's parents. However, the information concerning the parents' family situation is fragile and very fragmentary: all we know for sure is whether or not the respondent's parents are still living together at the time of the survey.

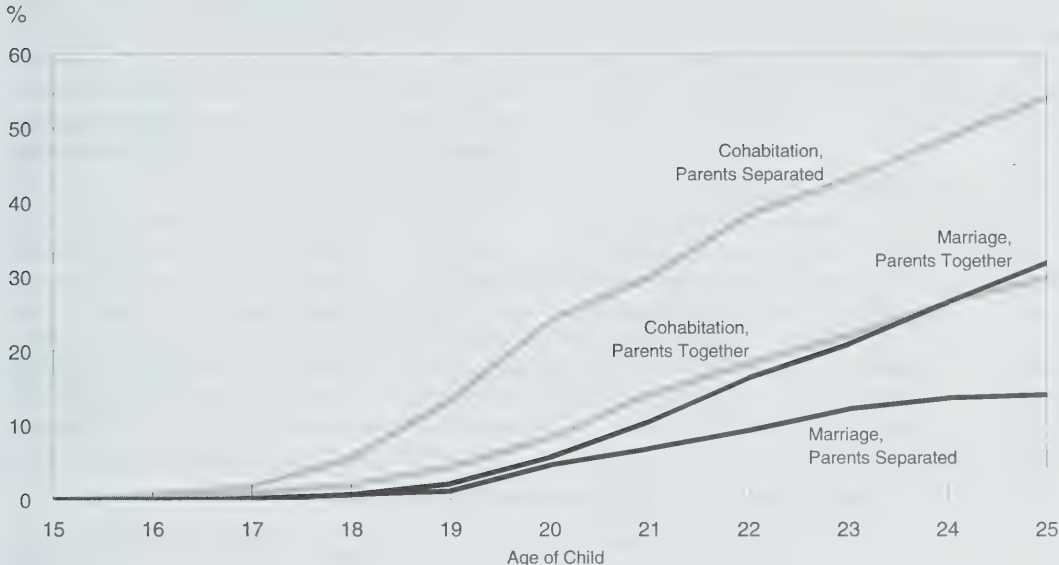
Since we have no information on the "timing" of the parental break-up we take several precautions to ensure the validity of our analysis. First, we restrict the sample to young respondents: men and women aged 15 to 34 years at the time of survey. These respondents are part of the generations who were most at risk of experiencing a parental divorce. They were born between 1956 and 1974, the eldest being at the threshold of adolescence when the 1968 Divorce law was passed. Further, since we cannot establish the exact timing of the parental break-up, we consider it safer to retain only younger generations for whom the parental separation happened when they were still at home or not very long after; the derived variable is thus only a "proxy" of the timing of parental breakdown. Second, we take great care in trying to establish as accurately as possible if the respondents' parents had truly experienced a separation and/or a divorce. For 5,618 respondents aged less than 35 at the time of survey: 888 cases where at least one parent was dead, and 32 cases where the information was not sufficient to classify the parents as "living together" are rejected; 3,823 cases of parents "still living together," including 13 cases where one parent was institutionalized and the other was not living with another partner, are retained; and 875 cases are classified as "separated parents," because the two were still alive but not living together, neither of them being institutionalized (in 59% of cases a new partner was mentioned).<sup>2</sup> Further reassurance on the validity of our measure of parents' separation was taken from the fact that the younger respondents in our sample (aged 15 to 24) are the ones experiencing parental disruption in greater proportions. For them, parental break-up occurred in large measure before adulthood.

### 3. Methodology

We use a series of life tables, cross-classified by parental marital status, to examine the timing and propensities of the offspring to start their life as couples, as parents, and to experience a marital dissolution. The life table method consists of calculating, for each possible parental situation, the probabilities of individuals experiencing a given family transition by age. For example, for respondents whose parents separated, the probability of starting conjugal life by marriage at each age interval between ages 15 to 25 is established by dividing the number of young individuals who marry during the age interval considered by the number of those who are still at risk, that is those who have not yet married or started cohabiting and who are still under observation. In this case, cohabitation and marriage are treated as competing risks, that is as alternative ways of forming a couple. In other words, those cohabiting are treated as censored cases in the analysis of marriage and they are removed from the group at risk from the moment they start living with a partner. The life table events established at each age interval are then cumulated to provide the overall probabilities of entering into a first union through marriage or cohabitation from age 15 to 25, according to the parental situation of respondents.

Life tables are calculated separately for men and women, and for each of the three transitions studied: forming a first union, giving birth to a child, experiencing a union dissolution. As an example, Figure 6.1 presents the cumulated probabilities of marrying or cohabiting for young women who were aged between 15 to 34 at time of survey. A look at this figure shows that: [1] young women with separated parents tend to form a union earlier than those whose parents are still together at time of survey (by age 20, 14% of young women from stable homes had started living with a partner through marriage or cohabitation versus 29% of young women whose parents were separated); [2] young women with parents still living together chose about equally to marry or to cohabit (roughly 30%), whereas those with separated parents had overwhelmingly chosen cohabitation over marriage as a way to start their conjugal life (at age 25, 54% of the latter had started living with a partner through cohabitation and only 14% through marriage). In data not shown, our analysis also reveals that young women with separated parents have a higher propensity to give birth at an early age

Figure 6.1  
Cumulated Probabilities of Marriage or Cohabitation Before the Age of Twenty-Five According to Parental Separation/Divorce (Women)



than those whose parents were still together (14% of the former had borne a child before reaching age 20, compared to 9% of the latter).

One limitation of the life table approach is that it does not allow us to assess the extent to which the effect of parental separation on child behaviour is associated with or mediated through a series of intermediate variables. In order to do so, we turn to “event history analysis.” This method examines the timing of events (such as marriage) in relation to covariates which might vary according to time. An “event” is defined as a “shift from a mutually exclusive state to another, and occurring at a specific and known point in time.” (Luke 1993: p. 205).

Event history analysis combines two types of methods: [1] the life table approach, which measures the probabilities and timing of events; and [2] regression analysis, which aims at disentangling the net effects of covariates on a dependent variable. In event history analysis, the “hazard” rate, or the instantaneous rate of experiencing a transition from one state to another (for example, from living as a single to marrying) is being modeled. We use proportional hazards models to study the effect of parental separation on children’s adult outcomes. In these models, the instantaneous rate of transition is represented as a function of two components that can be expressed as  $h(t) = h_0(t)\exp\{\beta X\}$ . The first component,  $h_0(t)$ , represents the underlying baseline hazard function, which varies over time but whose

form is left unspecified; the second component contains the parameters ( $\beta$ ) to be estimated and that measures the effects on the baseline hazard of a set of individual characteristics ( $x_i$ ), some of which may change over time (Cox, 1972).

The characteristics we use as independent variables are all entered into the models as dummy variables. The independent variables include, in addition to the covariate measuring whether or not the parents of the respondents have separated, the age cohort of respondents (15 to 24 and 25 to 34), the level of education completed (less than high-school diploma, high-school diploma, some post-secondary education, some college education), the region of residence (province of Quebec versus the rest of Canada), and religion (practicing Catholic, non-practicing Catholic, practicing Protestant, non-practicing Protestant, other religion, no religion). All these characteristics are measured at the time of survey. They might thus differ from the respondents’ attributes when they are at risk of entering a union or giving birth to a child. Some individuals might, for instance, have pursued further education or have migrated from one province to another. Having no retrospective information on these respondents’ attributes, we are forced to use those measured at the time of survey.<sup>3</sup>

As mentioned, the 1990 GSS does not provide any information concerning the family environment in which the child grew up. As one might expect these variables (family income, and



educational levels of parents, among others) influence both the likelihood of parents separating and the behaviour of children in young adulthood. Their omission from the model could lead to a biased estimate of the parental separation parameter. Our results should thus be interpreted with this caution in mind, and further research, based on new data, will be needed to evaluate them.

We examine different models for each outcome studied, first by looking only at the effect of the parental separation variable, and then adding one covariate at a time, in order to assess the way in which each of these characteristics affects the propensities of individuals to experience a given transition. Only two models are reported in this chapter. The first (referred to as the restricted model) presents the gross effect of parental separation on children's experiences, and the second (the full model) gives the net effects of all covariates included in the analysis. The parameter estimates included in the tables are presented in their exponential form ( $\exp\{\beta\}$ ) and thus express the risk of a specific group as a proportion of the baseline risk. A coefficient of 1 indicates that the characteristic analyzed has no effect, while a coefficient of 2.095, as depicted for example in the first column of Table 6.1, indicates that experiencing parental separation more than doubles the chances of a young woman cohabiting.

## 4. Results

### Union formation before the age of 25

The process of union formation is examined separately for men and women because of differences in behaviour and timing that have been observed between gender. First-unions formed through cohabitation are distinguished from those formed directly through marriage because, as we have shown in Figure 6.1, parents' separation seems to exert an opposite effect upon the likelihood of their children marrying or cohabiting. (Recall that when studying cohabitation, marriage is treated as a competing risk; in that case, individuals who marry are no longer considered at risk of starting their conjugal life through cohabitation from the moment marriage occurs.) The separation or divorce of parents is associated with a doubling of the risk that children will experience cohabitation before reaching the age of 25 when no other covariates are taken into account (see Panel A of Table 6.1). This relationship is more or less the same for both men and

women. The association of parental separation/divorce with the probability children will start their conjugal life through cohabitation remains important even when other variables are taken into account. For example, the coefficients presented in Panel B of Table 6.1 show that after controlling for their personal attributes women whose parents separated or divorced still have a 75% greater chance of cohabiting than those whose parents remained together.

These results also reveal that the risk of cohabitation decreases as education increases. Compared to women who did not finish high-school (the reference category), those who received a high-school diploma are about 30% less likely to start cohabiting before age 25, and those who completed some university education are around 60% less likely to do so.<sup>4</sup> These results are consistent with those obtained in previous research.

The chances of women cohabiting also appear to be related to age cohort. Women who were aged between 15 to 24 at the time of survey are more likely to first experience cohabitation than those aged 25 to 34, irrespective of their other characteristics. The same effect is observed for men, though the coefficient is not significant at the 0.05 level. Living in Quebec also tends to significantly increase the probability of cohabitation among young individuals, by 50% for women, and almost double for men. These results are related to the increase of common-law unions among younger cohorts, especially in the province of Quebec.

Not surprisingly, the likelihood of cohabitation is influenced by religion. Among women, Catholics or Protestants who reported attending services or meetings on a regular basis have about half the chances of first experiencing cohabitation than those who did not; the latter do not, however, seem less at risk of starting their conjugal life with a common-law partner than those declaring no religion. Women who mentioned a religion other than Catholicism or Protestantism have the lowest propensity to cohabit, with only 27% the chances of those declaring no religion. Finally, religion plays a similar role in affecting men's probabilities of cohabiting, with the sole difference that non-practicing Catholics are less at risk of living with a common-law partner than those mentioning no religion.

It is also shown in Table 6.1 that parental separation or divorce exerts an opposite effect on the likelihood of marriage and cohabitation: it is associated with about a 40% reduction in the

Table 6.1

**The Impact of Parental Separation/Divorce on the Propensity of Young Adults to Cohabit or Marry before the Age of Twenty-Five**

	Cohabitation		Marriage	
	Women	Men	Women	Men
<b>A. Restricted Model</b>				
Parental Separation/Divorce	2.095***	2.000***	0.557***	0.820
<b>B. Full Model</b>				
Parental Separation/Divorce	1.756***	1.716***	0.584***	0.869
High-School Diploma	0.713**	0.716*	1.078	1.192
Post-Secondary Education	0.635***	0.685***	0.501***	0.828
College Education	0.385***	0.403***	0.302***	0.400***
(No High-School Diploma)				
15 to 24 Years of Age (25 to 34 Years)	1.196*	1.113	0.406***	0.397***
Quebec (Rest of Canada)	1.533***	1.958***	0.719**	0.589**
Practicing Catholic <sup>1</sup>	0.572***	0.429***	1.642**	1.684*
Non-Practicing Catholic	0.943	0.651*	1.104	1.133
Practicing Protestant	0.540***	0.473***	1.791***	2.324***
Non-Practicing Protestant	1.076	0.765	1.460	1.521
Other Religion	0.268***	0.215**	2.133**	1.611
(No Religion Indicated)				

**Source :** Calculations by the authors using Statistics Canada, General Social Survey, 1990.

**Note :** The reported coefficients are from a Cox regression model. The analysis is based on a sample of 2,283 women and 2,294 men aged 15 to 34 at the time of the survey. Weighted data are used throughout, and the reference category is indicated in parentheses.

\* Indicates significant at 0.05

\*\* Indicates significant at 0.01

\*\*\* Indicates significant at 0.001

<sup>1</sup> Practicing individuals are those having attended services or meetings connected with their religion (excluding special occasions, such as weddings, funerals or baptisms) in the last 12 months.

chances of women starting to live with a partner through marriage while more than doubling their chances of doing so through cohabitation. Parental separation also diminishes the chances of marriage among men, but to a lower extent and the coefficient does not appear to be significant at the 0.05 level; this result could be due to the fact that men tend to marry later than women and that the sample on which the analysis is based is quite small. The introduction of other covariates into the analysis does not significantly alter the effect of parental separation on the likelihood of marriage, as a comparison of the coefficients presented in Panels A and B of the table shows.

Apart from the conjugal situation of parents, three sets of characteristics exert an effect on

the risk of marrying directly that runs counter to that observed for those who started their conjugal life through cohabitation. The younger age cohort has about 40% the chance of the older cohort to first marry before reaching the age of 25. Respondents living in Quebec have lower chances of marrying directly than those living in the rest of Canada (72% for women and 59% for men). Practicing a religion on a regular basis tends to significantly increase the likelihood of choosing marriage to start living with a partner. On the one hand, practicing Catholic and Protestant women have between 1.6 and 1.8 times more chances of marrying directly before reaching the age of 25 than those mentioning no religion, while on the other hand, those reporting another religion have more than twice the

chances of doing so. The effects of these variables on the propensity of men to marry are similar to those noted for women, although the coefficient associated with "other" religion, although quite large, does not appear to be significant.

Education does, however, have a similar association with both young adults' propensity to first marry or cohabit.<sup>5</sup> In both cases, increasing levels of education are associated with reduced risks of entering a union at young ages, but the level at which this variable starts operating differs for marriage and cohabitation; hence, only at the post-secondary level for women and at the college level for men is education significantly related to lower chances of young adults marrying. However, the impact on the likelihood of cohabitation occurs as soon as high-school is completed.

### Giving birth to a child before age 20

Parental separation has been shown in the literature to be related to early or premarital child-bearing. We restrict the analysis of the timing of first birth in relation to the family environment in childhood to female respondents. Two reasons motivate this choice. First, previous studies have shown that retrospective data on reproductive histories are more reliable for women than for men (Furstenberg 1988). Second, since births to young mothers might occur outside of a union, it is likely that some of the fathers involved will not be recognized as such or even be informed of their paternity.

The impact of different variables on the propensities of women to give birth to a child before reaching the age of 20 is presented in Table 6.2. The first column of this table presents the chances of a women giving birth to a child, irrespective of her marital status, while the second and third columns deal with the chances of having a child outside of a union or before marrying. Most variables exert a similar impact on the chances of women giving birth, regardless of their marital status, but this effect is generally stronger for births occurring outside of a union or outside of a marriage.

Women who experienced their parents' separation or divorce appear to be far more likely to give birth to a child before their 20<sup>th</sup> birthday than those who grew up in a stable family environment: irrespective of marital situation, the former are 1.68 times more likely than the latter to experience such an event before age 20; they are 1.89 times more likely to bear a child outside

of a union, and 1.82 times more likely to do so before marrying.

The effect of parental separation remains important even after other characteristics are entered into the model; hence, women who saw their parents part still face about 1.5 more chances than those growing up in a stable family of bearing a child before reaching the age of 20, irrespective of their marital situation. It is interesting to note that the introduction of the other covariates contributes to more significant reduction of the coefficient associated with parental separation in the model focusing only on births occurring outside of a union or of marriage than in the model including all births. This result seems to suggest that in these cases the intergenerational transmission of family behaviour is mediated through intervening processes: parental separation influences offspring's educational achievement, which in turn directly affects the likelihood of women giving birth to a child outside of a union or marriage at an early age.<sup>6</sup>

Indeed, the level of education completed appears generally to be strongly associated with the propensity of women to give birth at an early age, and even more so for those having a child without living with a partner: compared with women who did not complete high-school, those who obtained a high-school diploma have (depending upon their marital status) between 30% to 46% the chances of having a child before reaching their 20<sup>th</sup> birthday; those who pursued some post-secondary education have around 20% of the likelihood, and those with some college education, less than 5%.

When considering all births, irrespective of the marital status of women, those who were aged 15 to 24 at the time of the survey appear to be less likely (with a third of the probability) to give birth to a child in their teens than do those who were aged 25 to 34. This result is, at first, surprising in light of the slightly increasing proportion of women giving birth to a child while in their early teens recently observed in Canada (Statistics Canada 1991). Our finding is, however, quite different when the analysis is restricted to births occurring outside of a union; in that case, the younger cohort appears to be slightly more likely to give birth to a child while in their teens than the older cohort, although this coefficient is not significant at the 0.05 level.

Irrespective of the marital status of women, those living in Quebec appear to have a lower propensity to give birth to a child before their 20<sup>th</sup>



Table 6.2  
The Impact of Parental Separation/Divorce on the Propensity of Young Women to Give Birth before the Age of Twenty

	All First Births	Births Outside of a Union	Premarital Births
<b>A. Restricted Model</b>			
Parental Separation/Divorce	1.682***	1.890**	1.815**
<b>B. Full Model</b>			
Parental Separation/Divorce	1.445*	1.469	1.373
High-School Diploma	0.463***	0.362***	0.304***
Post-Secondary Education	0.198***	0.216***	0.197***
College Education (No High-School Diploma)	0.034***	0.020***	0.014***
15 to 24 Years of Age (25 to 34 Years)	0.646**	1.017	0.880
Quebec (Rest of Canada)	0.692	0.760	0.794
Practicing Catholic <sup>1</sup>	0.882	0.783	0.769
Non-Practicing Catholic	1.963*	1.659	2.089*
Practicing Protestant	1.381	0.697	0.756
Non-Practicing Protestant	1.412	1.284	1.233
Other Religion (No Religion Indicated)	1.749	1.059	1.203

**Source :** Calculations by the authors using Statistics Canada, General Social Survey, 1990.  
**Note :** The analysis is based on a sample of 2,311 women aged 15 to 34 years at the time of the survey. Weighted data are used throughout, and the reference category is indicated in parentheses.

\* Indicates significant at 0.05

\*\* Indicates significant at 0.01

\*\*\* Indicates significant at 0.001

<sup>1</sup> Practicing individuals are those having attended services or meetings connected with their religion (excluding special occasions, such as weddings, funerals or baptisms) in the last 12 months.

birthday than their counterparts living in the rest of Canada, when controlling for their other personal attributes. This finding is consistent with the results obtained in other studies investigating teenage fertility in Canada (Guilbert and Forget, 1991). Religion also seems to be related to the likelihood of women giving birth, although most coefficients do not turn out to be significant. Only non-practicing Catholics, however, differ significantly from those declaring no religion; they have almost twice the chances of bearing a child in their teens than those without a religious affiliation (except for births occurring outside of a union where the effect of religion is less pronounced). Practicing Catholics appear less likely than most of those declaring another religion or no religion to give birth to a child before age 20,

although the coefficient does not turn out to significantly differ from the latter. The lower propensities of practicing Catholic women to bear a child while in their teens (and of practicing Protestant women to give birth outside of a union or before marrying) could be related to less open attitudes toward pre-union or premarital sexual activity. The effect of religion on the likelihood of women to giving birth at an early age remains, however, difficult to interpret with the present data; in part, this is probably due to the small size of the samples involved, and to the fact that the level of religious observance declared by women at the time of the survey might be different from the one they experienced while in their teens.

## Union dissolution

Parental separation or divorce has been shown to influence not only the process of family formation among offspring but to also affect their own chances of experiencing a separation or divorce (Amato 1996). To explore this issue further we examine the likelihood of union dissolution between the ages of 15 to 34, but only for respondents who were aged 25 to 34 at the time of the survey. Those aged 15 to 24 were excluded in order not to over-represent an age cohort that is still in an early stage in its conjugal history, namely those who were very young when they married or started living with a partner and who are therefore more at risk of experiencing a union dissolution early in their life.

Apart from the variables included in the analysis of family formation, we also include the age of respondents at the beginning of the first union. Given the differences in timing that separate men and women the age categories retained for the analysis differ by gender. Common-law unions leading to a marriage are considered as only one union whose form changed over time; a time-varying covariate that takes the marriage into consideration from the moment it occurs within the respondents' lives has been added to the model. (The marriage dummy variable takes the value of 1 from the moment that the common-law partners marry. Otherwise it is set to zero.)

As can be seen in Table 6.3, parental separation or divorce appears to be weakly related to offspring's chances of experiencing a common-law break-up: it increases slightly the chances that both men and women who are cohabiting will separate, but the coefficients are not significant at the 0.05 level. Parental separation does, however, multiply the chances of married women experiencing a union dissolution by 1.7. The risk triples for married men. However, because of the sample sizes only this last coefficient is significant at the 0.05 level. Having parents part seems to affect the chances of separation for both men and women in a similar way when both common-law unions and marriages are grouped into a single category. Compared to those cohabiting or to those married who grew up in a stable family environment, those who saw their parents separate are about 1.7 times more likely to also go through a separation or divorce.

Part of the "intergenerational transmission of divorce" appears to be mediated through intervening variables, such as age at marriage or cohabitation (Amato 1996). Hence, when other

covariates are entered into the model, all the coefficients associated with parental separation are reduced quite significantly for women (compare the coefficients in Panels A and B of Table 6.3). This corroborates Amato's mediating process hypothesis. For men, however, the coefficients associated with parental separation are left almost unchanged by the inclusion of other covariates in the analysis. This would suggest that the intergenerational transmission of divorce is operating directly for them.

Age of respondents at union formation appears to be closely linked to the propensity of women to go through a divorce or a separation, but it does not seem to be significantly associated with the chances of men doing so. Women who married or started cohabiting when they were older tend to face lower chances of experiencing a separation than those who were young at the beginning of the union. For instance, women who were 23 years or older when they started living with a common-law partner have only 60% the chance of experiencing a separation than those who did so before reaching the age of 21; women who married between ages 20 to 22 have 70% less chances of separating than those who did so before 20; and those who married at age 23 have even lower chances of parting from their husband.

Marrying one's common-law partner significantly reduces the risk of separation among those who started their conjugal life through cohabitation. From the moment they marry, the risk of separation for men who are cohabiting is cut four-fold compared to those who maintain a common-law relationship. The comparable risk for women is reduced by 60%.

Few of the other variables included in the analysis have a high and consistent association across gender and type of union with the chances of young adults separating. The province of residence appears to significantly affect the chances of cohabiting females separating: women living in a common-law union in Quebec have about 40% less chance of parting from their partner than those living somewhere else in Canada. (See also Le Bourdais and Marcil-Gratton 1996.) On the other hand, the level of education completed appears to be related to the propensity of married women separating: when controlling for other individual characteristics, chances of marital breakdown increase with years of schooling. This effect could be linked to the greater economic autonomy of more educated women, for which separation or divorce might constitute a more

Table 6.3

**The Impact of Parental Separation/Divorce on the Propensity of Young Adults to Experience a Separation or Divorce**

	Cohabitation		Marriage		All Unions	
	Women	Men	Women	Men	Women	Men
<b>A. Restricted Model</b>						
Parental Separation/Divorce	1.159	1.117	1.752	3.102*	1.702***	1.671**
<b>B. Full Model</b>						
Parental Separation/Divorce	1.019	1.182	1.028	2.783*	1.167	1.348
High-School Diploma	0.835	0.934	1.473	0.400	1.005	0.833
Post-Secondary Education	1.214	0.921	2.758**	0.955	1.548*	0.916
College Education	0.980	1.011	4.113***	0.852	1.494	0.967
(No High School Diploma)						
Quebec (Rest of Canada)	0.570**	0.839	0.722	0.811	0.644*	0.928
Practicing Catholic <sup>1</sup>	0.862	1.017	1.144	0.310	0.756	0.829
Non-Practicing Catholic	0.965	0.812	4.479**	1.333	1.197	0.818
Practicing Protestant	0.756	1.416	0.850	0.508	0.634*	1.069
Non-Practicing Protestant	0.803	0.944	2.965*	1.174	1.068	1.043
Other Religion	2.060	4.395**	1.049	0.391	0.860	2.468*
(No Religion Indicated)						
Age at First Union	(under 18)	(under 20)	(under 20)	(under 22)	(under 18)	(under 20)
Women 18 to 19 years	0.857				0.946	
20 to 22 years	0.921		0.306***		0.659*	
23 years and +	0.588*		0.207***		0.473***	
Men 20 to 21 years		1.067				1.061
22 to 24 years		0.812		2.458		0.863
25 years and +		1.021		2.400		1.050
Married <sup>2</sup>	0.390***	0.258***			0.263***	0.127***

**Source:** Calculations by the authors using Statistics Canada, General Social Survey, 1990.

**Note:** The analysis is based on a sample of 970 women (462 whose first union was cohabitation, and 508 whose first union was marriage), and 849 men (431 cohabitations and 418 marriages). Weighted data are used throughout, and the reference categories are indicated in parentheses.

\* Indicates significant at 0.05

\*\* Indicates significant at 0.01

\*\*\* Indicates significant at 0.001

<sup>1</sup> Practicing individuals are those having attended services or meetings connected with their religion (excluding special occasions such as weddings, funerals, or baptisms) in the last 12 months.

<sup>2</sup> Defined as a time-varying covariate as described in the text.

**5. Conclusion**

plausible option. Finally, non practicing Catholic and Protestant females show higher propensities of experiencing a marriage dissolution than do women declaring no religion, while men reporting another religion are more at risk of parting from their common-law partner.

The data we used in this study are not without shortcomings. Nonetheless, with all the precautions taken to ensure the validity of our analysis, we are convinced of its relevance for a study of the transmission of family disruption across generations. Recent studies all point to the fact that



family transformations are on the rise in Canada, and that changes in the family environments of children as they grow up are to be expected for an increasing proportion of Canadians. Of course, the long-term impacts of parental separation and family reconstitution upon children are numerous and they go far beyond the scope of the socio-demographic effects analyzed here. However, any research that provides some quantitative measures of how these phenomena are likely to affect the way in which future generations will start their life as couples and as parents is important in understanding intergenerational dynamics.

Several of our findings concur with the results obtained in earlier research. Parental separation or divorce appears to be associated with the way in which children start their conjugal life: hence, it tends to significantly increase the likelihood of offspring first experiencing cohabitation while decreasing (at least for women) their chances of directly marrying. Parental separation has also been shown to be related to early, pre-union or premarital childbearing among young women, and with higher risks of union dissolution, for married men at least. For most outcomes studied, parental separation has both a direct effect of its own (that remains important even after controlling for other covariates), and an indirect effect mediated through intervening variables, such as the level of education achieved by offspring. Hence, the "intergenerational transmission of divorce" seems to be operating directly in influencing the chances of young men (who started their conjugal life through marriage) separating. In contrast, when we examine the risk of women giving birth to a child before reaching the age of 20 part of the intergenerational transmission of family behaviour appears to operate indirectly by influencing, first, the educational achievement of daughters which in turn influences their propensity to bear a child outside of a union or of marriage.

These results reinforce the idea that family instability experienced during childhood is associated with the behaviour of young adults as they start their life as couples and parents. Within an intergenerational perspective, family instability in childhood has also often been identified as a key factor that contributes to the economic hardship experienced by young individuals as they move into adulthood.

Our understanding of the intergenerational transmission of divorce is likely to be enriched by the use of more qualitative variables and of intermediate factors, such as those used in the developmental sciences. As an example, we could probably better understand the impact of family disruption in childhood on young adults' conjugal and parental behaviour if we were able to take into account the effects that family disruption first exerted on their attitudes towards gender roles and family life. Data from the 1995 GSS, which were released in February 1997, will allow the development of a far more comprehensive and satisfactory model, both because they provide more precise information on the circumstances of the parental separation and because they include more qualitative information.

Intergenerational equity most commonly refers to economic transfers from one generation to the next. Obviously, even in such a narrowly defined framework, researchers have rapidly come to the conclusion that economic well-being and economic redistribution among generations cannot be fully understood without including social variables into the analysis.

The most commonly mentioned impact of family instability in childhood on young adults' outcomes has been the reproduction of poverty. Children who have experienced living with a single mother also often experienced economic deprivation during this family episode. Further, economic deprivation in childhood has been shown to be associated with low socio-economic attainment in young adulthood, and with early age at giving birth to a child or at entering a union.

No matter how the reproduction of poverty and the transmission of family behaviour interact with each other, the way in which the future generations of Canadians will start their own family life will probably be closely related to the diverse familial living arrangements that they are now experiencing. More detailed analysis is required in order to monitor the impact that changes in the family environments of children exert first upon their cognitive and social development, and second upon their attitudes and behaviour as couples and parents. We may well find that the way in which parental separation was experienced by children is a much more relevant factor in explaining the intergenerational transmission of divorce than economic characteristics per se.

## Notes

- <sup>1</sup> Zhao et al. (1994) used a similar strategy with the 1990 GSS. Although they had very detailed information on the children's family life histories while they were growing up, they could study the impact of parental disruption only for the process of leaving home.
- <sup>2</sup> In 259 cases, the father mentioned living with a new partner; in 105 cases, the mother did so; and in 152 cases, both parents declared a new partner in their life.
- <sup>3</sup> Since schooling is generally not completed by age 15, we did try to adjust retrospectively for the level of education attained according to age. In other words, for a respondent aged 25 who declared, for example, having received a post-secondary diploma, we assumed that he had completed his high-school at age 17 and his post-secondary education by age 19. We thus created a time-varying covariate whose values change over time; for instance, the "without high-school diploma" dummy variable takes the value of 1 at age 15 and 16 and the value of 0 later on; the "high-school diploma" dummy variable takes the value of 1 at age 17 and 18 and the value of 0 before that age and later; and so on for the other categories of the education variable. This variable is not itself without problems: because of the wide variations in the school systems across Canada, we had difficulties in assigning ages to education levels; we also had to assume that respondents completed their schooling without interruptions. Using this time-varying covariate in our models did not change the results much. We thus retained the level of education completed at time of survey for the final analysis.
- <sup>4</sup> As pointed out by one anonymous referee, one could argue that "education" cannot be considered simply as an exogenous variable since educational attainment, marriage and first conception have been shown to be closely linked decisions in the economic literature (Lillard and Brien, 1994). Having no retrospective information on educational attainment, we are, however, in no position to ascertain the way in which the process of union formation is mediated through education. Since our main interest lies in evaluating the direct effect of parental separation on union formation, rather than modelling the intertwined processes of educational attainment and union formation, we redid the analysis by omitting the education variable from the equation. The exclusion of this variable had

almost no impact on the coefficients of the remaining variables, including that of the parental separation/divorce variable.

- <sup>5</sup> As it was the case for cohabitation, the exclusion of the education variable left almost unchanged the coefficients of the remaining variables.
- <sup>6</sup> As pointed out in note 4, these processes are not independent of one another and the decision to remain in school, for example, may also involve that of not giving birth. In order to ascertain the direct effect of parental separation on the propensity of young women to give birth, we redid the analysis by omitting the education variable. The exclusion of this variable slightly increased the coefficient associated with parental separation and those of non-practicing catholics and protestants. Clearly, these results point to the need for additional information on the family environment in which children grew up and on the timing of educational achievement in order to better understand the way in which these operate.

## Bibliography

- AMATO, P.R. (1996). "Explaining the Intergenerational Transmission of Divorce." *Journal of Marriage and the Family*. Vol. 58, 628-640.
- AMATO, P.R. (1993). "Children's Adjustment to Divorce: Theories, Hypotheses, and Empirical Support." *Journal of Marriage and the Family*. Vol. 55, 23-38.
- AXINN, W.G. and A. THORNTON (1996). "The Influence of Parents' Marital Dissolutions on Children's Attitudes Towards Family Formation." *Demography*. Vol. 33, 66-81.
- BLAU, P.M. and O.D. DUNCAN (1967). *The American Occupational Structure*. New York: John Wiley and Sons.
- CHERLIN, A.J., K.E. KIERNAN and P.L. CHASE-LANDALE (1995). "Parental Divorce in Childhood and Demographic Outcomes in Young Adulthood." *Demography*. Vol. 32, 299-318.
- COX, D.R. (1972). "Regression Models and Life Tables (with Discussion)." *Journal of the Royal Statistical Society. Series B*, Vol. 34, 187-220.
- DUCHESNE, L. (1996). *La situation démographique au Québec – Édition 1996*. Québec : Bureau de la Statistique du Québec.

- DUMAS, J. and Y. PÉRON (1992). *Marriage and Conjugal Life in Canada*. Ottawa: Statistics Canada, Catalogue Number 91-534.
- FURSTENBERG, F.F. Jr. (1988). "Good Dads - Bad Dads: Two Faces of Fatherhood." In A.J. CHERLIN (editor). *The Changing American Family and Public Policy*. Washington: Urban Institute Press.
- FURSTENBERG, F.F. Jr., S.D. HOFFMAN and L. SHRESTA (1995). "The Effect of Divorce on Intergenerational Transfers: New Evidence." *Demography*. Vol. 32, 319-333.
- FURSTENBERG, F.F. Jr. and J.O. TEITLER (1994). "Reconsidering the Effects of Marital Disruption. What Happens to Children of Divorce in Early Adulthood?" *Journal of Family Issues*. Vol. 15, 173-190.
- GABARDI, L. and L.A. ROSÉN (1992). "Intimate Relationships: College Students from Divorced and Intact Families." *Journal of Divorce and Remarriage*. Vol. 18, 25-56.
- GEE, E.M. (1992). "Adult Outcomes Associated with Childhood Family Structure: an Appraisal of Research and an Examination of Canadian Data." Simon Fraser University, unpublished.
- GLENN, N.D. and K.B. KRAMER (1987). "The Marriages and Divorces of the Children of Divorce." *Journal of Marriage and the Family*. Vol. 49, 811-825.
- GOLDSCHIEDER, F.K. and C. GOLDSCHIEDER (1989). "Family Structure and Conflict: Nest-Leaving Expectations of Young Adults and Their Parents." *Journal of Marriage and the Family*. Vol. 51, 87-97.
- GUILBERT, E. and G. FORGET (1991). "Teenage Pregnancy in Canada and Quebec." *Canadian Family Physician*. Vol. 37, 1184-1192.
- KEITH, V. and B. FINDLAY (1988). "The Impact of Divorce on Children's Educational Attainment, Marital Timing, and Likelihood of Divorce." *Journal of Marriage and the Family*. Vol. 50, 797-809.
- KIERNAN, K.E. (1992). "The Impact of Family Disruption in Childhood on Transitions Made in Young Adult Life." *Population Studies*. Vol. 46, 213-234.
- LE BOURDAIS, C. and N. MARCIL-GRATTON (1996). "Family Transformations Across the Canadian/American Border: When the Laggard Becomes the Leader." *Journal of Comparative Family Studies*. Vol. 27, 415-436.
- LILLARD, L.A. and M.J. BRIEN (1994). "Simultaneity in the Timing of Marriage, Cohabitation and Non-Marital Fertility." Paper Presented to the 1994 Annual Meetings of the Population Association of America, Miami Florida.
- LUKE, D.A. (1993). "Charting the Process of Change: A Primer on Survival Analysis." *American Journal of Community Psychology*. Vol. 21, 203-245.
- MARCIL-GRATTON, N. (1993). "Growing Up with a Single Parent, a Transitional Experience? Some Demographic Measurements." In J. Hudson and B. Galaway (editors). *Single Parent Families: Perspectives on Research and Policy*. Toronto: Thompson Educational Publishing.
- MCLANAHAN, S. (1985). "Family Structure and the Reproduction of Poverty." *American Journal of Sociology*. Vol. 90, 873-901.
- MCLANAHAN, S. and L.L. BUMPASS (1988). "Intergenerational Consequences of Family Disruption." *American Journal of Sociology*. Vol. 94, 130-152.
- MITCHELL, B.A., A.V. WISTER and T.K. BURCH (1989). "The Family Environment and Leaving the Parental Home." *Journal of Marriage and the Family*. Vol. 51, 605-613.
- MUELLER, C.W. and H. POPE (1977). "Marital Instability: A Study of its Transmission Between Generations." *Journal of Marriage and the Family*. Vol. 39, 83-93.
- STATISTICS CANADA (1991). *Births*. Ottawa: Statistics Canada Catalogue No. 84-210.
- THORNTON, A. (1991). "Influence of the Marital History of Parents on the Marital and Cohabital Experiences of Children." *American Journal of Sociology*. Vol. 96, 868-894.
- THORNTON, A. and D. CAMBURN (1987). "The Influence of the Family on Premarital Sexual Attitudes and Behaviors." *Demography*. Vol. 24, 323-340.
- WALLERSTEIN, J.S. (1991). "The Long-Term Effects of Divorce on Children: A Review." *Journal of the American Academy of Child and Adolescent Psychiatry*. Vol. 30, 349-360.
- WEBSTER, E.R., T.L. ORBUCH and J.S. HOUSE (1995). "Effects of Childhood Family Background on Adult Marital Quality and Perceived Stability." *American Journal of Sociology*. Vol. 101, 404-432.



YOUNG, C. (1987). *Young People Leaving Home in Australia*. Canberra: Australian Family Formation Project Monograph No. 9.

ZHAO, J.Z., F. RAJULTON and Z.R. ZENaida (1994). "Family Structure and Parental Characteristics: Their Impact on Children's Home-Leaving in Canada." Paper Presented to the 1994 Annual Meetings of the Population Association of America, Miami Florida.



## Chapter 7

# Child Psychiatric Disorders, Poor School Performance and Social Problems: The Roles of Family Structure and Low-Income

MARTIN D. DOOLEY, LORI CURTIS, ELLEN L. LIPMAN AND DAVID H. FEENY

---

The primary goal of this chapter is to improve our understanding of the roles that family structure and low-income play in the determination of psychiatric disorders, poor school performance, and social problems among Canadian children. While there is broad agreement that environmental factors have an impact on these outcomes, until recently there has been little or no Canadian data with which to assess the importance of socio-economic factors in determining the incidence and severity of such problems.

The National Longitudinal Survey of Children and Youth (NLSCY) promises a major improvement in this situation, and our analysis represents an essential, early step in using the first wave of this survey. We have two major objectives. First, we assess the association between, on the one hand, a variety of psychiatric, academic, and social difficulties, and on the other, a range of socio-economic variables, principally lone-parenthood and low parental income, but also a host of other demographic characteristics. Second, we compare findings from the NLSCY to those from what previously was Canada's best survey of child health and development conducted a decade earlier, the Ontario Child Health Study (OCHS).

Briefly, our multivariate estimates reveal that being the child of a lone mother is strongly associated with virtually all of the child difficulties under study. This finding is quite robust, but its interpretation is far from obvious when only a single cross-section of data is available. In contrast, the estimated link between various child problems and the low-income status of the family is not robust, but rather depends importantly on the income measure and estimation method used. This raises the need to examine the matter with more detailed income data that is not publicly available. Our comparison of the OCHS and the NLSCY indicate that psychiatric disorders have become more common, and

repeating a grade less common, in Ontario between 1983 and 1993. Furthermore, the data suggest that the changes that took place over this decade may have been less favourable to the children of lone mothers than to the children of two-parent families.

### 1. Review of the Literature

The Ontario Child Health Study was carried out in 1983 with a follow-up in 1987 (Boyle, Offord, Hoffman 1987, Offord, Boyle, Racine, et al. 1992). Data were collected on child psychiatric disorders, social and educational functioning, physical health and a variety of socio-demographic variables. Several studies have used the OCHS data to examine the relationship between family economic disadvantage and child morbidity. Cadman et al. (1986) demonstrated high rates of chronic physical health problems among children in low-income families. Studies of emotional and behavioural problems have also demonstrated a consistent and significant association between economic disadvantage (low-income or welfare participation) and psychiatric disorder (Lipman, Offord and Boyle 1994, Lipman and Offord 1997, Offord, Boyle and Jones 1987). Among 4 to 11 year-old children, the odds of one or more psychiatric disorders (attention deficit hyperactivity disorder, conduct disorder or emotional disorder) for a poor child were more than three times that for a non-poor child (Lipman et al. 1994). Similarly, the odds for a boy aged 6 to 11 whose family received welfare income were four times that of a boy from a family with no welfare income (Offord, Boyle and Jones, 1987).

Studies of social and educational functioning have demonstrated similarly significant associations between poverty and morbidity (Lipman et al. 1994). Furthermore, the significant association between poverty and a variety of morbidities are not limited to childhood. For



example, at least one-third of children with conduct disorder continue to experience serious psychosocial difficulties into adulthood (Offord and Bennett, 1994).

Four papers have examined the association between family structure<sup>1</sup> and child psychosocial morbidity using the OCHS data. Munroe Blum, Boyle and Offord (1988), using the 1983 cross-section, found that children in lone parent families were at a significantly increased risk of a variety of psychiatric and academic morbidities. Lone parent family status did not, however, continue to have a significant relationship with morbidity when welfare income was controlled in the analysis. Dooley and Lipman (1996) and Curtis et al. (1996) also used data from the 1983 cross-section to examine the statistical relationships among family status, income and various measures of child psychosocial and physical health. Both papers found instances of significant associations between lone-mother status and child problems. However, the estimated impact of low-income was found to be much more robust.

Only two studies have used the longitudinal OCHS data to examine the issues of concern in this chapter, in part due to the small number of lone mothers for whom data is available in both 1983 and 1987. Lipman and Offord (1997) found that both family status and poverty indicators had significant independent relationships with poor child outcome. Curtis et al. (1996) found, as in their work with the 1983 cross-section, that the data are more consistently supportive of a role for low-income than for family status *per se*.

Data from other sources have found both poverty and single-parent family status to be associated with increased rates of child psychosocial morbidity (Duncan and Brooks-Gunn, 1997). Lipman, Offord and Dooley (1996) examined preliminary data from the NLSCY and found that almost one-third (30.4%) of 4 to 11 year-old children from lone-mother families have a psychiatric disorder, significantly greater than the rate among children from two-parent families (18.8%). They note, however, that the majority of children from lone-mother families do not have these problems and most children with these problems come from two-parent families. They also find that both single mother family status and low-income significantly and independently influence child well-being, but their multivariate analysis was limited to these two independent variables. Offord and Lipman (1996) also examined the frequency of emotional and behavioural problems using the

early NLSCY data and generally find that problem levels decrease as family income rises.

## 2. Canada Wide Results

The NLSCY is designed to measure child development and well-being over time. The first cycle in 1994-1995 collected information on 22,831 children who were newborn to eleven years of age, the long term goal being to follow these children into adulthood. The sample excluded children who lived in institutions for more than six months and Aboriginal children living on-reserve. (Information was collected in the Yukon and Northwest Territories but was not included in the first data release available to us.) The primary respondent in the NLSCY is the household member most knowledgeable about the child, usually the parent but more strictly referred to as the PMK (person most knowledgeable). Our analysis is based on 12,735 children aged 4 to 11. These data are described in the appendix in more detail.

The percentages of children with psychiatric, schooling or social problems by family and low-income status are presented in Table 7.1. Consider the three psychiatric disorders: hyperactivity, conduct disorder, and emotional disorder. (The symptoms associated with these are listed in Table 7A.1 of the Appendix.) The most notable feature is that the children of lone mothers always have a higher incidence than do the children of two parents **conditional on income class** (comparing column [1] with [3] and column [2] with [4]). For example, the smallest such conditional difference is three percentage points (9% - 6%) and occurs in the case of conduct disorder between the children of lone mothers and couples who are, in both cases, above the low-income cut-off. The largest such differences are those between the children of low-income lone mothers and low-income couples for conduct disorder and emotional disorder. These are both eight percentage points (15% - 7% and 18% - 10%). Note also that the percentage of each disorder among the children of lone mothers exceeds the incidence among the children of low-income couples.

The differences by low-income status, conditional on family-status class are smaller (column [1] versus [2], and column [3] versus [4]). For example, the prevalence of hyperactivity is the same among the children of low-income lone mothers and their more well to do counterparts

Table 7.1  
**Percentage of Children With Psychiatric  
 Disorders, Schooling Problems and Social Problems**

	[1] Low-Income Lone Mothers (Below Low- Income Cut-off)	[2] Lone Mothers Above Low- Income Cut-off	[3] Low-Income Couples (Below Low- Income Cut-off)	[4] Couples Above Low- Income Cut-off	[5] Total
(Percent of Sample)					
Hyperactivity	9	9	4	4	5
Conduct Disorder	15	9	7	6	7
Emotional Disorder	18	14	10	8	10
One or More Psychiatric Disorders	29	22	16	14	16
Repeated a Grade	13	9	8	4	5
Poor School Performance	7	3	4	2	3
Frequent Social Problems	9	4	5	2	3
One or More of Any Problems	43	32	24	20	23

**Notes:** Columns [2] and [4] refer to families above the Low-Income Cut-offs. Number of Observations: 12,735 children (aged 4 to 11) for psychiatric disorders and 9,283 children (aged 6 to 11) for schooling and social problems. OCHS thresholds used.

**Source:** Calculations by authors from Statistics Canada, National Longitudinal Survey of Children and Youth.

(9%), and among the children of low-income couples and their counterparts (4%). In the cases of conduct and emotional disorders, the differences between the children living below and above the Low-Income Cut-off (LICO) are negligible, but are six and four percentage points respectively among the children of lone mothers. In sum, family status appears to matter more than does low-income status when it comes to differences in the prevalence of these three psychiatric disorders. In results not shown here, this same qualitative conclusion emerges if we use different thresholds for low-income status or for each disorder.

Only 5% of children have ever repeated a grade, reflecting the fact that the oldest children are only eleven years old. Unlike the case of psychiatric problems, the conditional differences by low-income status are similar in magnitude to the conditional differences by family status. The difference between children below and above the LICO is four percentage points for both lone mothers (13% - 9%) and couples (8% - 4%). The difference between the children of lone mothers and couples is five percentage points for both

those below the LICO (13% - 8%) and above (9% - 4%). Only 3% of the PMK's report that the child is doing "poorly" or "very poorly" in school.<sup>2</sup> The children of lone mothers below the LICO have the highest percentage with this problem but even this figure is only 7%.<sup>3</sup>

PMKs also report only 3% of children as having "frequent" or "constant" problems in getting along with parents, peers or teachers.<sup>4</sup> As with "doing poorly in school," the children of poor lone mothers stand out from the other groups with a prevalence rate of 9%. If one uses the "very low-income" (income less than three-quarters of the 1992 LICO) measure, however, differences of 4 and 5 percentage points also emerge between the children of poor and non-poor couples in the case of poor school performance and social problems respectively.

The final row of Table 7.1 presents the percentages of children, aged 6 to 11, with one or more of any of the problems. The differences by family status are large: 19 percentage points (43% - 24%) in the case of low-income children and 12 points (32% - 20%) in the case of those

above the low-income cut-off. Among the children of lone mothers, the difference by low-income status is also sizeable at 11 percentage points (43% - 32%) but among children with two parents this same difference is small at 4 points (24% - 20%). The general picture is that family status matters regardless of low-income status, and that low-income status matters but particularly among lone-mother families.

The socio-economic characteristics of the children and their families in our sample are presented in Table 7.2. Fourteen percent are from lone-mother families. Two-thirds of the children of lone-mothers live in low-income families and one-half in very low-income families, which clearly dwarfs the corresponding low-income rates among the children of couples. The PMKs who are lone mothers are more likely to lack a high school degree and less likely to have a diploma or degree from college or university. They are also younger and have fewer children than do the married PMKs. The age distribution of the children differs little by family status.

Table 7.2 demonstrates that families headed by lone mothers and married couples differ in a number of ways. Furthermore, the research cited in the previous section has usually found child psychiatric, schooling and social problems to be associated with more than one of the variables in Table 7.2. Hence, we turn to multivariate analysis in order to assess the partial association between various child outcomes and these socio-economic characteristics. We have chosen to use the logit model which assumes that the probability of an outcome is

$$\text{Prob}(Y=1 | X) = e^{X\beta} / (1 + e^{X\beta}) = 1 / (1 + e^{-X\beta})$$

where  $Y$  is a dichotomous dependent variable,  $X$  is a vector of independent variables,  $\beta$  is the estimated logit coefficients and  $e = 2.718$ .<sup>5</sup> Our selection of independent variables was guided by the availability of data in the NLSCY, and by the literature on the determinants of health (Evans and Stoddart 1990, Grossman 1972, Grossman and Joyce 1989).

A number of methodological issues merit attention. The first concerns missing values. As we describe in the appendix, 1,103 observations are omitted because of missing values for a dependent variable. We are not aware of an obvious solution for this problem. However, we did examine the data to see if observations with and without missing values for the dependent variables differed in terms of the unconditional means of the independent variables. Using 5% level of

significance, children with missing values for an outcome variable were more likely to be female, aged 8 to 11, and to have a lone mother, low-income and an above average number of siblings.<sup>6</sup> The only independent variables with missing values are those for the age and education of the parents. There were 164 such observations and these are not included in the estimation samples. As a check, we re-estimated each logit model including these 164 observations and a dummy variable equal to one if there was a missing value for any independent variable.<sup>7</sup> The coefficient for the missing value dummy is never significant at even a 20% level of significance.

Second, we represent the sex of the child as a simple dummy variable, that is, it just shifts the intercept in our logit models. It is plausible, however, that the impact of other independent variables depends on whether the child is a girl or a boy. Therefore, we estimated each logit model with an interaction term between the sex of the child and each other independent variable. We were never able to reject the hypothesis that the coefficients were individually or jointly equal to zero. The lowest p-value from these tests was 0.19. Hence, the data support our assumption that the sex of the child is a shift factor.

Third, the 11,833 children in our sample come from only 5,052 different families. In order to adjust for this fact and to arrive at standard error estimates which are generally more robust than the conventional ones, we employed a method developed by White (1980). This adjustment typically did not make a large difference.

Fourth, one variable of interest is the market work patterns of the parents. Parental market work may affect child health and development in a variety of ways (some negative and some positive) and this may well be true even in the presence of controls for family income. A negative impact might reflect the absence of high quality, affordable substitutes for parental care. A positive impact might arise for at least two reasons. Greater parental market work may contribute to higher parental self-esteem and thereby help the parent to pay more and better attention to the child's needs. In addition, greater market work specifically by a married mother may provide her with more control over family expenditures. The "good mother" hypothesis asserts that the average mother has greater concern for her children's welfare than does the average father. If true, then greater maternal economic control should result in a greater proportion of family



Table 7.2  
Characteristics of Families in the NLSCY: Sample Distribution

	Lone Mothers	Couples	Total
	(%)		
Lone Mother			14
Very Low-Income <sup>a</sup>	50	7	14
Low-Income <sup>b</sup>	66	15	22
Mother did not have High School Degree	22	15	16
Mother had High School Degree	16	19	19
Mother had Some Postsecondary	35	28	29
Mother had College or University Diploma or Degree	27	38	36
Mother Older than 34 Years	47	60	58
Children 8 to 11 Years	49	51	51
Mean Number of Children Per Family	2.0	2.4	2.3
Unweighted Number of Families with Children 4 to 11 Years	872	5,567	6,439
Unweighted Number of Families with Children 6 to 11 Years	807	5,489	6,296

<sup>a</sup> Family income is below 75% of the 1992 Low-Income Cut-off.  
<sup>b</sup> Family income is below the 1992 Low-Income Cut-off.  
**Source:** Calculations by authors from Statistics Canada, National Longitudinal Survey of Children and Youth.

income being directed to the children’s interests including health care (Schultz 1990, Thomas 1990, Phipps and Burton 1992, and Browning et al. 1994).

We estimated all of the models with a dummy variable for whether or not the PMK worked “full-year, full-time” in the market, and a second dummy variable for whether or not the PMK worked “part-year or part-time” in the market. We were consistently unable to reject the hypothesis that either of these coefficients is zero.<sup>8</sup> Hence, we do not include these estimates in the tables presented below. However, we have only begun to examine this issue with the NLSCY and further study is merited.

Finally, we had to decide whether or not to use the sample weights in our multivariate analyses. In the economics literature, this issue receives relatively little attention because it is

commonly found, or at least assumed, that weighting makes little difference. We adapted a test suggested by DuMouchel and Duncan (1983) in the context of linear regression. Each logit model was estimated including an interaction between each independent variable and the sample weight. We then tested the hypothesis that the interaction terms were jointly equal to zero. We were able to reject the hypothesis with a p-value of at least 0.05 in the cases of conduct disorder, emotional disorder and social problems. The same hypothesis could not be rejected in the cases of hyperactivity, repeated grade and school problems. Hence, we estimated our logistic regressions using both weighted and unweighted data. The weights affect not only the standards errors but also some point estimates. This was especially true for low-income coefficients in the psychiatric disorder regressions.

Table 7.3 presents the estimates of our logit models for the three psychiatric disorders.<sup>9</sup> All of the independent variables are dummies except for the number of children. (The constant corresponds to a child who is a male, 4 to 7 years of age, from a non-poor, two-parent family in which the mother is under age 35 and has a high school degree.) Consider first, the estimates for hyperactivity. Lone-mother status is associated with a significantly higher probability of this disorder but low-income is not.<sup>10</sup> We included an interaction term for these two variables because of an expectation that low-income might have a different effect among lone mothers than among couples given that low-income spells tend to be longer among the former. The interaction coefficient is negative but not significantly different from zero. The lowest and highest categories for the mother's schooling have coefficients of the expected sign but only the latter has a p-value less than 0.05. The probability of hyperactivity is significantly less among girls and there is weak evidence (p-value less than 0.10) that it is more likely among older children and those from smaller families.

We wish to illustrate the quantitative impact of these coefficients, particularly those for family status and low-income. This impact is non-linear so we first enter the predicted probability for a "base case" in the row after the constant. The "base case" has the characteristics of the constant except for the fact that we assume that there are two children in the family. The row after the "base case" shows the effect of changing the value of the lone mother variable from zero to one. This increases the predicted probability of hyperactivity by 7 percentage points from 6% to 13%. The next row shows the effect of the income coefficient which in this case is virtually zero. The interaction term is almost always not significant and hence we do not show a separate income effect for a lone mother.<sup>11</sup>

The coefficients for conduct disorder and emotional disorder are similar to those for hyperactivity in several respects. The coefficient for lone-mother status is both large and statistically significant. A change in this variable increases the predicted probability of a conduct disorder from 8% to 14% and of an emotional disorder from 6% to 10%. Neither the low-income coefficient nor the interaction term are significant for either of these disorders. The absence of a high school degree for the PMK is associated with a significantly higher likelihood of a conduct disorder. The children of older

mothers are less likely to have either a conduct disorder or an emotional disorder. Girls are less likely to have a conduct disorder and older children are more likely to have an emotional disorder. The number of children in the family is positively associated with the presence of a conduct disorder.

The final column of Table 7.3 indicates that one or more of the three psychiatric disorders is more likely if the child is a boy or is aged 8 to 11, or if the child has a lone mother, a mother with less than a high school degree or a mother under age 35. The lone-mother coefficient raises the predicted probability of a disorder by 10 percentage points from 15% to 25%.

Table 7.4 presents the estimates of our logit models for schooling problems, social problems and one or more of any of the problems presented either in this table or Table 7.3. In each case, the coefficient for lone-mother status is statistically significant and increases the predicted probability by 2 to 4 percentage points, quite a large increase relative to the base probability. Unlike psychiatric disorders, the low-income coefficients for both repeated grade and frequent social problems are also statistically significant and have the impacts on the predicted probability of 1 and 2 percentage points respectively. The interaction coefficients are all small and nonsignificant.

Mother's education generally has the expected sign but the only significant coefficient is the impact of "no high school degree" on "repeated grade." Mother's age is significant only for grade repetition. Boys and older children are more likely to have each of the problems in Table 7.4. The number of children in the family has a weak positive association with "doing poorly in school" and a weak negative association with social problems.<sup>12</sup>

The last column of Table 7.4 presents the logit estimates for our most comprehensive summary measure. As mentioned the value of this variable is one if the child has one or more of any of our psychiatric, schooling or social problems. The estimates indicate that the likelihood of one or more problems is greater if the child is a boy or is aged 8 to 11, or if the child has a lone-mother, a mother with less than a high school degree or a mother under age 35. Once again, the quantitative impact of the lone-mother coefficient is substantial and raises the predicted probability of a disorder by 14 percentage points from 20% to 34%.<sup>13</sup>

Table 7.3  
Logit Estimates for Psychiatric Disorders

	Hyperactivity	Conduct Disorder	Emotional Disorder	One or More Psychiatric Disorders
Lone Mother	0.87 (3.6)	0.64 (2.6)	0.55 (2.8)	0.63 (3.6)
Low-Income	-0.01 (0.06)	-0.08 (0.51)	0.22 (1.4)	0.10 (0.79)
Lone Mother and Low-Income	-0.21 (0.62)	0.35 (1.1)	0.14 (0.53)	0.12 (0.51)
Mother did not have High School Degree	0.30 (1.5)	0.49 (2.9)	0.14 (0.83)	0.24 (1.8)
Mother had Some Postsecondary	0.01 (0.06)	0.15 (1.0)	-0.01 (0.09)	0.02 (0.14)
Mother had College or University Diploma or Degree	-0.38 (2.1)	0.12 (0.81)	0.05 (0.30)	0.007 (0.06)
Mother Older than 34 Years	-0.17 (1.2)	-0.48 (4.3)	-0.25 (2.4)	-0.34 (4.1)
Female Child	-0.80 (5.9)	-0.57 (5.3)	0.03 (0.28)	-0.32 (4.1)
Child 8 to 11 Years	0.21 (1.6)	0.14 (1.4)	0.81 (8.4)	0.47 (6.1)
Number of Children	-0.12 (1.8)	0.21 (3.7)	-0.03 (0.50)	0.02 (0.59)
Constant	-2.5 (10.6)	-3.0 (14.0)	-2.7 (13.8)	-1.8 (11.9)
Probability of Outcome (Base Case) <sup>a</sup>	0.058	0.08	0.06	0.15
Effect of Lone Mother Coefficient <sup>b</sup>	+0.07	+0.06	+0.04	+0.10
Effect of Low-Income for Couples <sup>b</sup>	-0.0006	-0.006	+0.01	+0.01

**Note:** T-ratios in parentheses. Weighted data with OCHS thresholds. Number of Observations: 12,735 children, 4 to 11 years.

<sup>a</sup> Predicted probability corresponding to the constant (a boy, aged 4 to 7, from a non-poor, two-parent family with mother under 35 with a high school degree) and a total of two children.

<sup>b</sup> Change in the predicted probability for the base case when the dummy variable changes from zero to one.

The most surprising feature of our results thus far is the weak association between (current) low-income status and any of the three psychiatric disorders or poor school performance. We undertook the following steps to assess the robustness of this finding. We estimated each of the logit models in Table 7.3 and 7.4 with the following variations undertaken one at a time: [1] "very low-income" (income less than three-quarters of the 1992 LICO) was used in place of "low-income" (income less than the 1992 LICO); [2] the 10% thresholds were used in place of the OCHS thresholds; [3] unweighted data were used in place of weighted; and [4] a dummy variable equal to one if total household income

was less than \$20,000 was used in place of "low-income."

Alternatives [1] and [2] produce coefficient estimates for low-income and the interaction term (and other variables) that are quite similar to those in Tables 7.3 and 7.4. This was not true of alternatives [3] and [4]. The left side of Table 7.5 contains the coefficients for lone-mother, low-income and their interaction from test [3] above. The only noticeable change for the lone-mother variable is the drop in the coefficient for repeated a grade but this still remains highly significant. The low-income coefficients for conduct disorder, emotional disorder, one or more psychiatric



Table 7.4  
Logit Estimates for School Problems, Social Problems, and One or More  
of Any of Psychiatric, Schooling or Social Problems

	Repeated Grade	Poor School Performance	Frequent Social Problems	One or More of Any Problems
Lone Mother	1.04 (3.5)	0.58 (1.9)	0.67 (2.0)	0.74 (4.0)
Low-Income	0.44 (2.3)	0.19 (0.70)	0.86 (3.2)	0.13 (1.0)
Lone Mother and Low-Income	-0.35 (0.93)	0.24 (0.54)	-0.03 (0.06)	0.13 (0.52)
Mother did not have High School Degree	0.59 (3.1)	0.36 (1.4)	0.24 (0.82)	0.35 (2.6)
Mother had Some Postsecondary	-0.13 (0.65)	-0.04 (0.13)	-0.16 (0.60)	0.01 (0.12)
Mother had College or University Diploma or Degree	-0.07 (0.34)	-0.39 (1.5)	-0.06 (0.22)	-0.02 (0.15)
Mother Older than 34 Years	-0.29 (2.1)	-0.10 (0.49)	-0.22 (1.1)	-0.31 (3.6)
Female Child	-0.48 (3.5)	-0.76 (3.8)	-0.39 (2.0)	-0.35 (4.4)
Child 8 to 11 Years	1.12 (6.0)	0.53 (2.7)	0.58 (2.5)	0.44 (5.0)
Number of Children	0.07 (0.92)	0.18 (1.7)	-0.15 (1.7)	0.02 (0.43)
Constant	-3.9 (13.2)	-4.1 (9.7)	-3.6 (9.2)	-1.4 (9.0)
Probability of Outcome (Base Case) <sup>a</sup>	0.02	0.03	0.02	0.20
Effect of Lone Mother Coefficient <sup>b</sup>	+0.04	+0.02	+0.02	+0.14
Effect of Low-Income for Couples <sup>b</sup>	+0.01	+0.005	+0.02	+0.02

**Note:** T-ratios in parentheses. Weighted data with OCHS thresholds. Number of Observations: 9,283 children aged 6 to 11.  
<sup>a</sup> Predicted probability corresponding to the constant (a boy, aged 4 to 7, from a non-poor, two-parent family with mother under 35 with a high school degree) and a total of two children.  
<sup>b</sup> Change in the predicted probability for the base case when the dummy variable changes from zero to one.

problems, and one more of any problem are all now statistically significant. (Repeated a grade and social problems already had significant coefficients in Table 7.4.) The magnitude of each of these four coefficients, however, is only about one-third to one-half that of the corresponding lone-mother coefficients. The interaction coefficients are all non-significant. The other coefficient estimates (not shown here) are quite similar to those in Table 7.3 and 7.4.

The right side of Table 7.5 contains the coefficients which result from test [4] above. In this

case, we used a dummy variable equal to one if total household income was less than \$20,000 as the measure of low-income.<sup>14</sup> We initially experimented with dummy variables for a larger set of the income categories that are available for both lone-mothers and couples in the public use file, specifically, \$20,000 to \$29,999, \$30,000 to \$39,999 and \$40,000 and above. However, very few of the dummy variable coefficients for these other categories were significant. For the estimates on the right side of Table 7.5, we used weighted data and substituted the number of persons in the household for the number of

Table 7.5  
**Selected Logit Estimates Using Unweighted Data  
 and an Alternative Low-Income Measure**

	Unweighted Data Household Income less than 1992 LICO			Alternative Low-Income (Weighted) Household Income less than \$20,000		
	Lone Mother Income	Low- Income	Lone Mother and Low- Income	Lone Mother	Income less than \$20,000	Lone Mother and Income less than \$20,000
Hyperactive	0.77 (4.2)	0.17 (1.3)	-0.15 (0.63)	0.68 (3.2)	0.35 (1.3)	-0.44 (1.2)
Conduct Disorder	0.64 (4.1)	0.31 (2.8)	0.05 (0.24)	0.99 (4.8)	0.37 (1.8)	-0.35 (1.1)
Emotional Disorder	0.67 (4.9)	0.24 (2.5)	-0.09 (0.52)	0.72 (3.8)	0.65 (3.3)	-0.47 (1.7)
One or More Psychiatric Disorders	0.66 (5.8)	0.22 (2.7)	-0.04 (0.23)	0.71 (4.4)	0.51 (3.2)	-0.33 (1.4)
Repeated Grade	0.63 (3.0)	0.50 (3.8)	-0.08 (0.30)	1.2 (4.3)	0.70 (2.9)	-0.68 (1.8)
Poor School Performance	0.76 (3.0)	0.13 (0.71)	0.0007 (0.002)	0.78 (2.7)	0.99 (2.9)	-0.33 (0.71)
Frequent Social Problems	0.68 (2.6)	0.56 (3.1)	0.05 (0.16)	0.69 (2.3)	1.4 (4.3)	-0.63 (1.3)
One or More of any Problems	0.65 (5.5)	0.27 (3.4)	0.06 (0.41)	0.82 (4.8)	0.57 (3.3)	-0.30 (1.2)

**Note:** T-ratios in parentheses. Number of Observations: 12,735 children, aged 4 to 11 for psychiatric disorders and 9,283 children aged 6 to 11 for schooling and social problems. Models included all regressors from Tables 7.3 and 7.4 which are education and age of PMK, age and sex of child, and number of children in family.

children. Neither of these changes, however, had major effects on the estimates. The lone-mother coefficients remain highly significant and are all somewhat larger in size than in Tables 7.3 and 7.4. Most of the low-income coefficients are significant. Conduct disorder has a p-value of 0.08, and only hyperactivity lacks a strong association with low-income. The income coefficients are smaller than the lone-mother coefficient in the case of psychiatric disorders, but not in the case of poor school performance and frequent social problems. The interaction terms never have a p-value less than 0.05, however, the point estimates are consistently negative and large in absolute size indicating that this particular "income measure" may discriminate better in the case of couples than in the case of lone mothers.

What are the main conclusions to be drawn from our results? One conclusion is that our estimates of the effect of current low-income are not robust. The most conventional approaches (Tables 7.3 and 7.4) indicate that low-income matters for grade repetition and frequent social problems, but not for psychiatric disorders or poor school performance. The use of either unweighted data or of a dummy variable for family under \$20,000, however, yields a strong association between low-income and every problem except hyperactivity. A major goal of the NLSCY is to assess the statistical association between child health and family income. The nonrobust nature of the estimates of this relationship highlight the need to conduct the analysis with more detailed income data. The aggregated measures available to us simply do

not offer a clear answer to this key policy question.

A second conclusion is that lone-mother status is the variable most consistently and significantly associated with our psychiatric, schooling and social outcomes. The coefficient estimates for this variable are quite robust, but there are many questions concerning their proper interpretation. To what extent does this finding represent the fact that Canadian lone-mother families have longer spells of low-income than two-parent families? If there is a lone-mother "effect" not due solely to economic resources, what does this represent? Is it the limited time resources ("time poverty") of the typical lone mother or might it be the health problems of the lone mothers themselves? Would the lone-mother coefficient be as large were we using a different, and perhaps more appropriate, comparison group (for example, comparing lone-mother families to those two-parent families with a high risk of dissolution as opposed to a random sample of all two-parent families)? In the 1994 Violence Against Women Survey, 16% of all currently married women reported that they have been physically abused by their current partner. However, 60% of previously married women reported that they were physically abused by their ex-partner (Kingston-Riechers 1997). This implies that, in at least some cases, the problems of the children of lone mothers may reflect primarily the abusive nature of the union into which the children were born. For such children, marital dissolution may represent a distinct improvement in their home environment which we are missing by comparing them to a random sample of children from two-parent families. Our ability in future NLSCY cycles to follow the same children into and out of families with different structures and constraints will represent a major improvement in this regard.

As for the other independent variables, we commonly (though not always) estimated a lower likelihood of problems among the children of women over age 34. This result, like that of the lone-mother coefficient, admits a variety of interpretations. One is that the mother's age may be a proxy for the long run income of the parents if, as seems likely, higher levels of earnings are positively associated with delayed fertility. Other possibilities are that older mothers may be more mature, have greater time resources or have more widely spaced children. All of these deserve further scrutiny in future studies.

We typically found a lower incidence of problems among girls. This has some support in the earlier literature especially in the case of hyperactivity and conduct disorder (Offord et al. 1987). Among the dummy variables for the PMK's education, only the coefficient for "no high school degree" always had the expected sign and even this estimate was significant in only 2 out of 6 problems. This was somewhat surprising given our expectation that this variable might reflect a variety of influences on child health and development including a permanent income effect.

### 3. Developments in Ontario

In this section, we compare estimates from the Ontario Child Health Study and the Ontario subsample of the NLSCY (henceforth NLSCY-Ontario) with the intention of examining changes over the decade 1983-1993. The survey methods and instrumentation of the OCHS are described in detail elsewhere (Boyle et al. 1987). The target population included all children born between January 1, 1966 and January 1, 1979 whose usual place of residence was a household in Ontario. Statistics Canada surveyed a total of 1,869 families and 3,294 children in 1983. The interviewers collected information from a parent (usually the mother), from a teacher for the 4 to 11 year olds, and from the youths themselves in the case of 12 to 16 year olds. There was also a follow-up survey in 1987. We use only parental reports in 1983 for children aged 4 to 11.<sup>15</sup>

The OCHS and the NLSCY differ in a number of respects other than provincial scope. First, the proportion of children with a lone mother is 9% in the OCHS sample but 15% among children from Ontario in the NLSCY. This increase is consistent with the growth in the proportion of families with young children which are headed by lone mothers between 1983 and 1994 and does not, we believe, primarily reflect differences in the methods used to identify lone-mother and two-parent families in the two samples (Dooley 1995). Second, the low-income status variable in the OCHS is a close, though not exact, approximation to whether or not the family's income is above or below the 1969 Statistics Canada LICO. The 1992 LICOs used in the NLSCY are substantially higher (in real dollars) than the 1969 LICOs. As discussed in the Appendix, the best approximation we have for OCHS low-income variable in the NLSCY data is whether or not the family has income below



75% of the 1992 LICO ("very low-income"). Third, the sample sizes differ. There are 1,315 children, aged 4 to 11, and 1,084 children, aged 6 to 11, in the OCHS sample. In particular, the small number of children of lone mothers in the OCHS sample (110 aged 4 to 11 and 99 aged 6 to 11) should be kept in mind when assessing our results. In contrast, there are 3,105 children, aged 4 to 11, and 2,273 children, aged 6 to 11, from Ontario in the NLSCY sample. Finally, the number of questions asked to assess psychiatric disorders differed slightly between the two surveys (see Appendix).

Table 7.6 presents the proportion of children in each survey with each of three problems: one or more psychiatric disorders (hyperactivity, conduct disorder or emotional disorder); ever repeated a grade; frequent problems in getting along with peers, parents or teachers. The figures for Ontario children in the NLSCY are similar to those for the national NLSCY sample in Table 7.1 with the following two exceptions: 5% of the NLSCY children of lone mothers above the low-income cut-off in Ontario have repeated a grade as opposed to 9% in the national sample; and 9% of the NLSCY children of low-income couples in Ontario have frequent social problems as opposed to 5% in the national sample.

The next to bottom row of Table 7.6 shows that the percentage of children with a psychiatric disorder increased from 11% in the OCHS to 16% in the NLSCY-Ontario. This increase in the incidence of a psychiatric disorder between the two surveys is also true of each family status and low-income status, except in the case of the children of poor couples using the 1992 LICO. The increases are larger for the children of lone mothers than for the children of couples. As noted above, however, there is a difference in the number of questions used to measure psychiatric disorders. The differences may, therefore, reflect measurement differences.

The percentage of children who have ever repeated a grade declined from 9% in 1983 to 4% in 1993. This question is identical on the two surveys. We suspect that the downward trend may reflect a change in the propensity of school teachers and administrators to make students repeat a grade as much as it does a change in actual school performance.<sup>16</sup> However, we have no obvious explanation for why the decline in this percentage should be greater among the children of low-income lone mothers and higher income couples. The questions used to assess a "social problem" are identical on the two surveys

as are the overall percentages of children with this type of problem (4%). Furthermore, there do not appear to be major differences between the surveys in the incidence of social problems by family status or low income status.

The results of logit models for each of the three dependent variables (using the same set of independent variables as in Tables 7.3 and 7.4) are presented in Table 7.7, which contains the coefficients for lone-mother status, low-income status and the interaction between these two variables. We report NLSCY-Ontario estimates obtained with three different income measures. The very low-income measure was used because this best approximates the only low-income measure available in the OCHS data. Income under \$20,000 was used because of the impact this had with the national NLSCY data.

Consider first the estimates for the presence of one or more psychiatric problems in Panel A of Table 7.7. The lone-mother coefficients are all of similar magnitude, but the 1993 estimates have much larger t-ratios possibly reflecting the larger sample size. The 1983 low-income coefficient is large and quite significant. As with the national sample, the low-income coefficients for NLSCY-Ontario are not robust. Only income under \$20,000 provides an estimate of a size and significance comparable to the OCHS. In each case, the interaction is not significant although, as with the national NLSCY sample, the estimate in the case of income under \$20,000 indicates a possible difference between the children of couples and lone mothers. In other respects, the four sets of logit estimates for psychiatric disorder are quite similar. In each case, the likelihood of a disorder is distinctly lower for a child who is female, under age 8, and whose mother is 35 or over. The impact of mother's education is weak in each case.

The second panel of Table 7.7 presents the estimates for "ever repeated a grade." In the 1983 results, neither lone-mother nor low-income status appear to matter. A decade later, however, both lone-mother and low-income status are strongly associated with the likelihood of repeating a grade in most cases, especially that of income under \$20,000. The interaction coefficient implies that this income effect may be true only of two-parent families. In results not shown here, mother's education does have a significant coefficient in the 1983 data along with the gender and age of the child. This was also generally true of the 1993 estimates obtained from the NLSCY.

Table 7.6  
Percentage of Children With Psychiatric, Schooling or Social Problems:  
Ontario, 1983 and 1993

Family Status and Low-Income Status	One or More Psychiatric Disorders			Repeated Grade			Frequent Social Problems		
	1983	1993		1983	1993		1983	1993	
		Very Low- Income	Low- Income		Very Low- Income	Low- Income		Very Low- Income	Low- Income
(Very) Low-Income Lone Mother	24	32	29	22	14	13	11	11	9
Lone Mother	14	22	21	6	7	5	3	4	3
(Very) Low-Income Couple	18	22	16	10	8	8	8	11	9
Couple	9	14	14	8	2	2	3	3	2
Total	11	16		9	4		4		4
Number of Observations	1,315	3,369		1,084	2,450		1,084		2,450

**Note:** Very Low-Income refers to family income below 75% of the 1992 Low-Income Cut-off (LICO). This better approximates the 1969 LICO used in the OCHS.  
Low-Income refers to family income below the 1992 LICO.

**Sources:** 1983 data are from the Ontario Child and Health Study, 1994 data from the National Longitudinal Survey of Children and Youth.

Panel C of Table 7.7 presents the logit estimates for the presence of “frequent or constant” problems in getting along with parents, peers or teachers. Low-income has a large and statistically significant coefficient in all four specifications. Just as consistently and interestingly, none of the lone-mother coefficients have a p-value less than 0.05. This is the only case in which the NLSCY data, from either Ontario or Canada as a whole, did not indicate a strong association between lone-mother status and the likelihood of a problem.<sup>17</sup> In results not reported here, mother’s age and the child’s age and sex continue to play important roles in the NLSCY estimates but not in the OCHS. Mother’s education has weak effects in each case.

What are the principal differences revealed by comparing the OCHS and NLSCY data? The data in Table 7.6 indicate that there may have been an increase in the prevalence of psychiatric disorders and a decrease in the prevalence of grade repetition between 1983 and 1993, at least in Ontario. There is no indication of change in the prevalence of social problems. The multivariate estimates for 1993 in Table 7.7 reveal that being the child of a lone mother was generally associated with a higher likelihood of a psychiatric disorder and of repeating a grade. This partial relationship was not statistically

significant in 1983. The same was true of income and grade repetition. Low-income implied a greater likelihood of repeating a grade in 1993 data but not in 1983. Multivariate estimates for social problems were similar in the two years. Do the observed differences in these multivariate results represent a real change in conditional differences between children of varying socio-economic backgrounds in Ontario? One should clearly hesitate to infer too much from these early findings. Differences between estimates from the OCHS and the NLSCY may primarily reflect measurement matters and sample size. These caveats notwithstanding, such results should also prompt further research.

4. Conclusion

The goal of this chapter is to improve our understanding of the roles socio-economic factors play in the determination of psychiatric disorders, poor school performance and social problems among Canadian children. More specifically we use the National Longitudinal Survey of Children and Youth to assess the association between a variety of psychiatric, academic, and social difficulties, and a range of socio-economic variables (including the number, age, income, education and market work of parents, and the sex, number

Table 7.7  
Selected Logit Estimates for Ontario, 1983 and 1993

	1983	1993		
		Very Low-Income	Low- Income	Income less than \$20,000
<b>A. One or More Psychiatric Disorders</b>				
Lone Mother	0.48 (1.0)	0.55 (2.2)	0.55 (1.7)	0.77 (2.8)
Very Low-Income	0.74 (2.2)	0.44 (1.6)	0.12 (0.6)	0.67 (2.5)
Lone Mother and Very Low-Income	-0.27 (0.4)	0.04 (0.1)	0.21 (0.5)	-0.60 (1.5)
<b>B. Ever Repeated Grade</b>				
Lone Mother	-0.23 (0.3)	1.1 (2.3)	1.1 (1.4)	1.6 (3.2)
Very Low-Income	-0.14 (0.7)	0.91 (1.7)	1.0 (2.9)	1.2 (2.2)
Lone Mother and Very Low-Income	1.1 (1.0)	-0.33 (0.4)	-0.43 (0.5)	-1.3 (1.8)
<b>C. Frequent Social Problems</b>				
Lone Mother	-0.90 (0.9)	0.39 (1.0)	0.35 (0.7)	0.48 (1.3)
Very Low-Income	1.5 (2.9)	1.6 (3.8)	1.4 (4.1)	1.2 (3.3)
Lone Mother and Very Low-Income	0.65 (0.6)	-0.49 (0.4)	-0.37 (0.6)	-0.52 (1.0)

**Note:** T-ratios in parentheses. Weighted data with OCHS thresholds. Controls for the age and gender of the child, and the age and education of the mother are also included. See Table 7.6 for sample sizes and data sources.

and age of children). We analyse three types of psychiatric disorders: hyperactivity, conduct disorder and emotional disorder. Our two measures of academic performance were whether or not the child had ever repeated a grade and whether or not parents reported the child as doing “poorly” or “very poorly” in school. A social problem was deemed present if the child has “frequent” or “constant” problems in getting along with other children, teachers or parents. The prevalence of any one individual problem among the children in our sample was at most 10%. Twenty-three percent of the children had one (or more) of any of these problems.

Our multivariate estimates provide a number of interesting and not always expected conclusions. First, the estimated effect of low-income was quite sensitive to the income measure used and to the use of sample weights. We started with what we judged to be the most conventional

approach, weighted data with a dummy variable for whether or not family income was below the (1992) Low-Income Cut-off. The resulting low-income coefficients were significant only for grade repetition and frequent social problems, and were not significant for any psychiatric disorder or for poor school performance. The use of either unweighted data or a dummy variable for family income under \$20,000, however, yields a strong association between low-income and every problem except hyperactivity. Only very limited income measures are offered on the public use file available to us. More detailed income data is needed if we are to shed more light on this key policy issue.

Second, lone-mother status is strongly associated with virtually all of our (poor) outcomes. The coefficient estimates for this variable are both robust with respect to the estimation approach (weighting, disorder thresholds, income



measures) and they imply sizeable quantitative effects on the predicted probability of a disorder or problem. For example, lone motherhood is associated with a 14% higher probability of the child having one or more of the disorders/problems we study. The correct interpretation of this finding, however, is not straightforward. We have followed the standard practice of comparing the children of current lone-mother families to the children of current two-parent families. Is this appropriate? It may not be if many or most of the problems observed in the children of lone mothers have resulted from the dysfunctional nature of the two-parent family in which those children once lived. Exiting from such two-parent families may have had a beneficial impact on the health and development of the children in question rather than the negative effect which might be inferred from a simplistic reading of our estimates based on a single cross-section.

Even if our estimates are assumed to reflect the impact of one or more current differences between lone-mother and two-parent families, which of these differences are most relevant? Is it that low-income spells are longer among lone-mother families? Or is it the lack of non-monetary assistance from family, friends and social service agencies? The availability of data from future NLSCY cycles will enlarge our capacity to sort out the relative importance of the above and other possible interpretations of this very strong and consistent empirical relationship.

We also usually found a lower incidence of problems among girls and commonly, though not always, found the same among the children of women over age 34. We did not find a strong relationship between the individual problems and the parent's level of schooling. Only the coefficient for "no high school degree" always had the expected sign and even this estimate was statistically significant in only about one-half of the cases.

We also experimented with a dummy variable for whether or not the mother worked "full-year, full-time" in the market and a second dummy variable for whether or not the mother worked "part-year or part-time" in the market. We consistently found that the coefficients for both variables were not significantly different from zero. In future work, however, this issue should be pursued further using other measures of market work for both the mother and her spouse. Such work will be most useful once researchers have

access to more complete income and earnings data for the family and the individual parents.

Our second objective is to compare the 1993 estimates provided by NLSCY data for Ontario to those from the 1983 Ontario Child Health Study. Our comparison implied that psychiatric disorders may have become more common and repeating a grade less common in Ontario during this decade. There is no indication of a change in the prevalence of social problems. In the multivariate estimates with the 1983 data, there were no significant differences by family status. The 1993 estimates reveal, however, that children of lone-mothers are more likely both to have a psychiatric disorder and to repeat a grade. Furthermore, low-income children are more likely than their counterparts to have repeated a grade in 1993. This is not observed with the 1983 data.

Measurement issues and sample size may account for these different findings, but there are other possibilities. Could changes in the relative income levels of these two types of families have played a role? We know that low-income rates fell little or not at all among lone-mother families over this period, but that was also true of young couples with children (Dooley 1994a). We also know that the population of young (under age 35) lone-mothers became much more likely to be never married and to rely on welfare between these two surveys (Dooley 1996). What role might be played by changes in these and other characteristics of the lone-mother population? Was there any change in the relative access of different types of families to the services needed to deal with various psychiatric disorders or academic difficulties? Might practices governing grade repetition have changed in such a fashion as to have created greater differences by family status or income level? Much additional study with the first and future cycles of the NLSCY and with the OCHS is needed to shed light on these and other questions.

## Appendix

### Sample Selection

There are 14,226 children aged 4 to 11 in the NLSCY. From this number, we remove the following: eight children who do not live with either parent (biological, step, adopted or foster); 21 children for whom neither parent is the PMK; 195 children who live with a lone father; 1,103 children for whom there were missing values for a dependent (outcome) variable; and 164 children

Table 7A.1  
Symptoms of Hyperactivity, Conduct Disorder and Emotional Disorder  
in the National Longitudinal Survey of Children and Youth

Hyperactivity	Conduct Disorder	Emotional Disorder
Can't sit still, is restless or hyperactive	Destroys his/her own things	Seems to be unhappy, sad or depressed
Fidgets	Gets into many fights	Is not as happy as other children
Is distractible, has trouble sticking to any activity	Destroys things belonging to his/her family or other children	Is too fearful or anxious
Can't concentrate, can't pay attention for long	When another child accidentally hurts him/her (such as bumping into him/her) assumes the child meant to do it, then reacts with anger and fighting	Is worried
Is impulsive, acts without thinking	Physically attacks people	Cries a lot
Has difficulty awaiting turn in games or groups	Threatens people	Is nervous, high-strung or tense
Cannot settle to anything for more than a few moments	Is cruel, bullies or is mean to others	Has trouble enjoying him/herself
Is inattentive	Kicks, bites, hits other children	
	When mad at someone, tries to get others to dislike that person	
	When mad at someone, says bad things behind the other's back	
	When mad at someone, tells the other one's secrets to a third person	
	Steals at home	
	Vandalizes	
	Steals outside the home	

for whom we were missing values for an independent (conditioning) variable. These deletions result in a sample of 12,735 children aged 4 to 11. The school age sample is 9,283 children aged 6 to 11. Children who do not live with either parent or for whom neither parent is the PMK are excluded on the grounds that these may represent quite unusual and/or temporary family structures. The children of lone fathers were excluded because their number is too small for separate analysis and their socio-economic characteristics (especially income levels) are too dissimilar from those of lone mothers to justify a common category of "lone parents." Most (90%) of the missing values concern dependent

variables and statistical "solutions" for this problem are not (to our knowledge) readily available.

Child Outcomes

Child outcomes were examined in the areas of psychiatric, academic and social functioning. Selection of these child outcomes and of the methods used to assess the presence of a problem was guided by knowledge of the multiple components of healthy child development, previous research studies examining child psychosocial health, and availability of variables in the NLSCY (Offord et al. 1992, Offord et al. 1987). All of the data come from the parental reports

because the teachers' reports had not been released by Statistics Canada at the time we conducted our research.

Table 7A.1 lists the symptoms used in the NLSCY for each of the psychiatric disorders studied: **hyperactivity**, **conduct disorder** and **emotional disorder**. Briefly, **hyperactivity** is characterized by inattention, impulsivity and motor activity; **conduct disorder** is characterized by either physical violence against persons or property or a severe violation of societal norms; and **emotional disorder** is characterized primarily by feelings of anxiety and depression. We define the variable **one or more psychiatric problems** as one or more of hyperactivity, conduct disorder or emotional disorder.

The PMK was asked if each symptom in Table 7A.1 was "never or not true," "sometimes or somewhat true," or "often or very true" of the child in question. Values of 0, 1 and 2 respectively were assigned to these responses. The values of the responses to each question were then summed to obtain a score for each of the three possible problems. A disorder was deemed to be present if the child's score exceeded a given threshold. We used two sets of thresholds both of which have been used in previous research. The choice of threshold has little impact on the multivariate estimates. Therefore, we present one set of estimates in the tables and comment where relevant on the results yielded by the second set of thresholds. The multivariate results for psychiatric disorders in particular are much more sensitive to sample weights and the low-income measure than to the disorder thresholds.

The estimates presented in the tables of Section 7.2 are derived using thresholds from the Ontario Child Health Study (OCHS). This survey randomly sampled 3,294 children in Ontario in 1983 with a follow-up in 1987. The NLSCY relied heavily upon the OCHS particularly in the area of psychiatric disorders. A random sample of children in the OCHS were also clinically assessed by a child psychiatrist who was blind to the parental and teacher report data. The disorder thresholds were then established for the OCHS by selecting scores that maximized agreement with the child psychiatrists' diagnosis of the same disorders. In other words, the threshold scores in the OCHS were established at the point best discriminating the presence or absence of a disorder as diagnosed by a child psychiatrist. See Boyle et al. (1987) for complete details.

The OCHS and the NLSCY questionnaires are worded similarly. The number of questions asked on the two surveys of parents in the OCHS was similar but not identical. For example, there were 15 conduct disorder questions on the OCHS and, hence, a maximum score of 30 (15 times 2). The OCHS threshold score was nine, 30% of the maximum score of 30. The maximum score on the NLSCY is 28 (14 times 2), 30% of which is 8.4. We performed our NLSCY analyses with conduct disorder thresholds scores of both eight and nine. The resulting multivariate estimates were very similar. Those with a threshold of eight are presented in section 2. We used a similar procedure to establish OCHS-equivalent thresholds for hyperactivity and emotional disorders in the NLSCY data. Using this set of thresholds, 7% of the children in our sample are hyperactive, 5% have a conduct disorder and 10% have an emotional disorder. Sixteen per cent of children have one or more of these three disorders.

Our second set of disorder thresholds was established by selecting the score that separated the top 10% of the scores from the bottom 90% in the sample. Thus by definition 10% of children have each disorder according to this set of thresholds. Twenty one percent of the children have one or more of disorders based on these thresholds. These are the same thresholds as used in Lipman, Offord and Dooley (1996).<sup>18</sup> Thresholds which yield prevalence rates of 5% to 10% are commonly found in the literature. Support for these prevalence rates (and the associated thresholds) can be found in five major studies of child psychiatric epidemiology world-wide including Canada (Costello 1989). Henceforth, we refer to our two sets of thresholds as the OCHS and 10% thresholds respectively.<sup>19</sup>

In the area of academic functioning, **ever repeated a grade** is defined exactly as stated. A child is defined as having a **school problem** if the PMK reports that current overall school performance is poor or very poor. These two indicators of schooling problems variables were available only for children aged 6 to 11. Most children aged 4 and 5 were not attending school.

A child is defined as having a **social problem** if the PMK reports the child as having frequent or constant problems over the last six months in getting along with any one of other children (friends, classmates), teachers or parents. This variable was available for 4 to 11 year-old children but we used it only for 6 to 11 year-olds because of the absence of teacher responses for most 4 and 5 year-olds.



**One or more problems** is defined as having one or more of the following: one or more psychiatric disorders, ever repeated a grade, school problem, or social problem. This variable was defined only for children aged 6 to 11.

### Family Characteristics

We classified a family as a **lone-mother family** if the child was living with a mother who had no spouse or common-law partner living in the household. The comparison group is families in which a child was living with two parents. Parent refers to a biological, step, adoptive or foster parent. As noted above, 98% of Canadian children live in one of these two types of families. We only know the child's current living arrangements. In some cases, this may provide an inaccurate picture of the family structure(s) in which the child has been raised.

Our principal income variable is a conventional measure of low-income. Specifically, we classified a family as **low-income** if the family income level is below the 1992 Statistics Canada Low-Income Cut-off (LICO). We selected this particular measure because the 1992 LICO is the one most commonly used in current analyses of income distribution in Canada. Its value is a function of both family size and the size of the area in which the family resides. The entire set of LICOs is revised periodically to account for changes in proportion of income that the average family spends on necessities. The year of the LICO (1992 in the case of the NLSCY) refers to the reference year for the Survey of Consumer Finances, upon which a particular set of LICOs is based.

We focus on low-income status because many of the studies reviewed in Section 7.1 (particularly those from the OCHS) have found a non-linear relationship between family income and child health. The association is strongest at low levels of income. Another reason for this focus is that much recent discussion concerning child policy has centered on income-targeted proposals, such as an enriched federal child benefit, which have the principal goal of reducing the incidence of low-income among families with children. We wish to explore the possible health consequences of such proposals. The third and most binding reason is that the income data available in the NLSCY public use file are very limited. In particular, the continuous measure of family income, the family LICO, and the ratio of these two figures are all suppressed on the public use file.

One of the income measures available on the public use file divides the ratio of family income to needs (1992 LICO) into six categories, the lowest being 0.75 or less and the highest category 1.25 or more. Our low-income measure is derived from this variable. Also available on the public use file is a categorical variable for family income, the highest of which is \$40,000 or more for lone mothers and \$60,000 or more for couples. Family size is available on the public use file but city size is not so that the family's LICO cannot be estimated. We also experimented with two other measures of low-income. One alternative classifies a family as **very low-income** if the family income level was below 75% of the 1992 LICO. A second alternative, employed only in our multivariate analyses, uses a dummy variable equal to one if total household income was less than \$20,000 while controlling for the number of persons in the household. Our multivariate estimates of the association between low-income and child problems turn out to be quite sensitive to the measure of low-income which, we believe, emphasizes the need to use more finely disaggregated information.

Not only do we have limited income variables, we also as yet have only one year of data. Hence our low-income measures fail to distinguish between short and long spells. These may have quite different consequences for child health and development. The absence of such information may affect the estimated coefficients of variables other than low-income status. In particular, we suspect that at least part of the estimated impact of lone motherhood is really a permanent income effect, that is, it reflects the fact that lone mothers have much longer spells of poverty than do couples (Laroche 1997). The same may be true of other variables in our multivariate analysis such as parental education. More insight into this matter will be provided by future cycles of the NLSCY data.

Several other variables are also used in our multivariate analyses. These include the age and sex of the child, and the age, schooling level and market work of the PMK.

Finally, we implicitly assume in our multivariate analyses that child health and schooling are the outcomes of socio-economic factors such as income and family structure. It is certainly possible, however, that the opposite causal effect may be true in some cases. For example, severe childhood health problems may reduce family income by limiting the paid work of one or both parents. The stress arising from severe

health problems might also influence the likelihood of separation, divorce or remarriage. Unfortunately, there is little that can be done about this problem given the lack of identifying variables for a more complete structural model. Our approach is best viewed as one means of exploring the joint distribution of the variables that we believe to be of relevance to the process which determines child health and development.

## Notes

The support of Statistics Canada, the National Health Research and Development Program, the Social Sciences and Humanities Research Council, the Ontario Mental Health Foundation and the Canadian International Labour Network is gratefully acknowledged. Very helpful comments were received from Miles Corak and two anonymous referees, however, the contents are the sole responsibility of the authors and in particular should not be attributed to Statistics Canada.

<sup>1</sup> Our reading of the social science literature is that the use of “family structure” to refer to the number of parents residing with the family is common. This reflects the fact that the number of resident parents is arguably the most important source of variation in family structure among contemporary families with dependent children. We also have yet to find an alternative term which is more specific and equally succinct.

<sup>2</sup> Indeed, only 25% report that the child is doing “average” or worse. We comment on the use of this alternative measure later in the chapter.

<sup>3</sup> The teachers’ reports in the NLSCY Cycle One may be different. At least one other study has found that teachers provide lower assessments of student academic progress than do parents. Saigal and Szatmari (1991) examined a control sample of full-term children who were used in a long term, follow-up study of low birth weight children. Parents reported that only 4% of the control sample were doing “poorly” in school. However, teachers reported that 17% of the same children were doing “poorly.” The sample size for this study was small (145 children, 8 years of age), but this finding does highlight the need for careful scrutiny of the NLSCY teachers’ reports when they are made available.

<sup>4</sup> Twenty-three percent of PMKs report that her child has “occasional,” “frequent” or “constant” problems in getting along with parents, peers or teachers. We comment on the use of this

alternative measure of social problems later in the chapter.

<sup>5</sup> Economists tend to use the probit conditional probability function and discusses policy implications in terms of differences in predicted probabilities of the dependent variable. Health scientists tend to use the logistic conditional probability function and discusses policy implication in terms of the odds ratios. The compromise of our inter-disciplinary team is to use the logit conditional probability function and discusses policy implications in terms of differences in predicted probabilities of the dependent variable.

<sup>6</sup> As our multivariate estimates will show, children who live in low-income families, aged 8 to 11 and have lone mothers tend to have more problems. Girls, however, tend to have fewer problems. Hence, it is not clear if the absence of these observations tends to raise or lower the overall percentage of children with various difficulties in Table 7.1.

<sup>7</sup> In order to include such observations in the estimation sample, a specific value must be assigned to the “missing value” of the variable in question. We assigned a value of zero.

<sup>8</sup> The same is true if one substitutes the mother’s market work variables for the relatively few cases where the father is the PMK.

<sup>9</sup> Tables 7.3 and 7.4 present the estimates with weighted data and our principal low-income variable (income below the 1992 LICO). Table 7.5 illustrates the impact of using unweighted data or a different low-income measure.

<sup>10</sup> Our use of the term statistically significant usually refers to a p-value of 0.05 or less. “Weak significance” usually refers to a p-value less than 0.10 but greater than 0.05.

<sup>11</sup> Due to the large standard error for the interaction term, we also usually cannot reject the hypothesis that the sum of the low-income coefficient and the interaction term is different from zero.

<sup>12</sup> We also estimated logit models with several alternative measures of schooling and social problems. One alternate schooling measure is whether or not the child receives special education because of a “physical, emotional, behavioural or some other problem limits the kind or amount of school work she/he can do.” Seven percent of the children receive such education. A second alternate schooling measure is whether or not the parent reports that the child is doing “average” or worse



("poorly" or "very poorly") in school. Twenty-five percent of children meet this criterion. The alternate measure of social problems is whether or not the parent reports that the child has "occasional" or more frequent ("frequent" or "constant") problems in getting along with parents, peers or teachers. Twenty-three percent of children meet this criterion. In each case, the lone-mother coefficients have large marginal effects and t-ratios. Furthermore, the low-income coefficients are not significant ( $p < 0.05$ ) and have smaller marginal effects than do the lone-mother coefficients.

<sup>13</sup> We also analysed the predictive power of our estimates. For almost all individual outcomes and observations, our coefficients predict "no problem" in the sense that the individual predicted probability is less than fifty percent. In that limited sense, our models predict "well" because 10% or less of the children in our sample actually have each of the problems. An alternative test is to see if there is a difference in the mean predicted probability of each outcome for [1] children who actually do have a problem and [2] children who do not have the problem. For each outcome, the mean for group [1] is higher ( $p$ -value  $< 0.01$ ) than the mean for group [2].

<sup>14</sup> Thirteen percent of the sample has income below \$20,000. As shown in Table 7.2, 14% of the children are "very low-income" and 22% are "low-income." About 80% of those who have income less than \$20,000 also have "very low-income" and vice versa. Virtually all of those who have income less than \$20,000 also have "low-income," but only 60% of those who have low-income also have income less than \$20,000. Of those children with families of income less than \$20,000, two-fifths live with two parents and three-fifths live with a lone mother.

<sup>15</sup> Sample attrition between the initial OCHS and the 1987 follow-up survey was substantial. The number of lone mothers appearing in both 1983 and 1987 was less than 100 due to both sample attrition and changes in marital status.

<sup>16</sup> The propensity of teachers and administrators to fail a student of a given achievement level may also vary by province as well, although we note that the incidence of this problem among Ontario children in the NLSCY (4%) is virtually the same as for the national sample (5%).

<sup>17</sup> We also estimated the logits in Table 7.7 using the national NLSCY sample and including a dummy variable equal to one if the child is from Ontario. The coefficient estimates for the Ontario dummy were not significant for psychiatric disorder, significantly negative for repeated grade, and significantly positive for social problems.

<sup>18</sup> The approach of Lipman, Offord and Dooley differed from that taken in this study in a number of ways other than the thresholds used. They excluded all observations in which the PMK was not the mother and the only independent variables used in their multivariate analysis were lone-mother and low-income status.

<sup>19</sup> Note that the prevalence of an emotional disorder in the NLSCY sample is 10% using either of our thresholds. In order to provide a sensitivity test for this outcome, we used a second threshold for emotional disorder that was used in some OCHS studies. Seventeen percent of the NLSCY sample had an emotional disorder using this alternative threshold, but the multivariate estimates were very similar regardless of the threshold used.

## Bibliography

- ACHENBACH, T. and C. EDELBROCK (1981). "Behavioral Problems and Competencies Reported by Parents of Normal and Disturbed Children Aged 4 Through 16." *Monographs of the Society for Research in Child Development*. Vol. 46, 1-78.
- AVISON, W.R. and C.F. THORPE (1993). "Family Structure and Maternal Mental Health: Single Parenthood and Other Risk Factors." Paper presented to the 1993 American Public Health Association Annual Meetings. San Francisco, California.
- BOYLE, M.H., D.R. OFFORD and H.G. HOFFMAN (1987). "Ontario Child Health Study: I. Methodology." *Archives of General Psychiatry*. Vol. 44, 826-831.
- BROWNING, Martin B., François BOURGUIGNON, Pierre-André CHIAPPORI and Valerie LECHENE (1994). "Incomes and Outcomes: A Structural Model of Intra-Household Allocation." *Journal of Political Economy*. Vol. 102, 1067-96.



- CADMAN, D., M.H. BOYLE, D.R. OFFORD, P. SZATMARI, N.I. RAE-GRANT, J. CRAWFORD and J. BYLES (1986). "Chronic Illness and Functional Limitation in Ontario Children: Findings of the Ontario Child Health Study." *Canadian Medical Association Journal*. Vol. 135, 761-767.
- COSTELLO, E.J. (1989). "Developments in Child Psychiatric Epidemiology." *Journal of the American Academy of Child and Adolescent Psychiatry*. Vol. 28, 836-841.
- CURTIS, Lori (1997). "Single Parenthood and Health Status." Working Paper, Department of Economics, McMaster University.
- CURTIS, Lori, M. DOOLEY, E. LIPMAN and D. FEENY (1996). "Child Health and Family Socioeconomic Status: Application of the Health Utilities Index to the Ontario Child Health Study." Working Paper, Department of Economics, McMaster University.
- DOOLEY, Martin (1996). "The Evolution of Welfare Participation Among Canadian Lone Mothers from 1973-1991." Working Paper 96-02, Department of Economics, McMaster University.
- DOOLEY, Martin (1995). "Lone Mother Families and Social Assistance in Canada." In *Family Matters: New Policies for Divorce, Lone Mothers and Child Poverty*. Toronto: C.D. Howe Institute.
- DOOLEY, Martin (1994a). "The Converging Market Work Patterns of Married Mothers and Lone Mothers in Canada." *Journal of Human Resources*. Vol. 29, 600-20.
- DOOLEY, Martin (1994b). "Women, Children and Poverty in Canada" *Canadian Public Policy*. Vol. 20 430-43.
- DOOLEY, Martin and E.L. LIPMAN (1996). "Child Psychiatric Disorders and Poor School Performance: The Roles of Family Type, Maternal Market Work and Low Income." In *Towards the XXIst Century: Emerging Sociodemographic Trends and Policy Issues in Canada*. Proceedings of a Symposium of the Federation of Canadian Demographers.
- DUMOUCHEL, W.H. and G.J. DUNCAN (1983). "Using Sample Weights in Multiple Regression Analysis of Stratified Samples." *Journal of American Statistical Association*. Vol. 78, 535-43.
- DUNCAN, G. and J. BROOKS-GUNN eds. (1997). *Consequences of Growing Up Poor*. New York: Russell Sage Foundation.
- EVANS, Robert and Gregory STODDART (1990). "Producing Health, Consuming Health Care." *Social Science and Medicine*. Vol. 31, 1347-63.
- GROSSMAN, Michael (1972). "On the Concept of Health Capital and the Demand for Health." *Journal of Political Economy*. Vol. 80, 223-55.
- GROSSMAN, M. and Theodore JOYCE (1989). "Socioeconomic Status and Health: A Personal Research Perspective." In Deanna S. Gomber and Barbara H. Kehrer (eds.) *Pathways to Health: The Role of Social Factors*. Mento Park: The Henry J. Kaiser Family Foundation.
- JUDGE K. and M. BENZEVAL (1993). "Health Inequalities: New Concerns About the Children of Single Mothers." *British Medical Journal*. Vol. 306, 677-80.
- KELLAM S.G., M.E. ENSMINGER and J. TURNER (1977). "Family Structure and the Mental Health of Children: Concurrent and Longitudinal Community-Wide Studies." *Archives of General Psychiatry*. Vol. 34, 1012-22.
- KINGSTON-RIECHERS, JoAnn (1997). "Does the Frequency of Domestic Abuse Affect the Decision to Divorce?" Working Paper, Department of Economics, McMaster University.
- LAROCHE, Mireille (1997). "The Persistence of Low Income Spells in Canada, 1982-1993." Economic Studies and Policy Analysis Division, Department of Finance.
- LIPMAN, E.L. and D.R. OFFORD (1997). "Psychosocial Morbidity Among Poor Children in Ontario." In G. Duncan, J. Brooks-Gunn (eds.) *Growing Up Poor*. New York: Russell Sage Foundation.
- LIPMAN, E.L. and D.R. OFFORD (1994). "Disadvantaged Children." In *The Canadian Guide to Clinical Preventive Health Care: The Canadian Task Force on the Periodic Health Examination*. Ottawa: Health Canada, Catalogue No. H21-117/1994E.
- LIPMAN, E.L., D.R. OFFORD and M.H. BOYLE (1997). "Single Mothers in Ontario: Sociodemographic, Physical and Mental Health Characteristics." *Canadian Medical Association Journal*. Vol. 156, 639-45.
- LIPMAN, E.L., D.R. OFFORD and M.H. BOYLE (1994). "Economic Disadvantage and Child Psycho-social Morbidity." *Canadian Medical Association Journal*. Vol. 151, 431-37.

- LIPMAN, E.L., D.R. OFFORD and M.D. DOOLEY (1996). "What do we Know About Children from Single-Mother Families? Questions and Answers from the National Longitudinal Survey of Children and Youth." In *Growing Up In Canada*. Ottawa: Statistics Canada, Catalogue No. 89-550-MPE, no. 1.
- LIPMAN E.L., D.R. OFFORD, M.H. BOYLE, M. WONG and R. MAZUMDAR (1996). "Sociodemographic Characteristics and Physical and Mental Health Characteristics of Single Mothers in Ontario: Results from the Ontario Health Supplement." Unpublished.
- MOILANEN I. and P. RANTAKALLIO (1988). "The Single Parent Family and the Child's Mental Health." *Social Science and Medicine*. Vol. 27, 181-86.
- MUNROE BLUM H., M.H. BOYLE and D.R. OFFORD (1988). "Single-Parent Families: Child Psychiatric Disorder and School Performance." *Journal of the American Academy of Child and Adolescent Psychiatry*. Vol. 27, 214-19.
- OFFORD, D.R. and K. BENNETT (1994). "Conduct Disorder: Long-Term Outcomes and Intervention Effectiveness." *Journal of the American Academy of Child and Adolescent Psychiatry*. Vol. 33, 1069-1078.
- OFFORD, D.R., M.H. BOYLE and B.R. JONES (1987). "Psychiatric Disorder and Poor School Performance among Welfare Children in Ontario." *Canadian Journal of Psychiatry*. Vol. 32, 518-525.
- OFFORD D.R., M.H. BOYLE, Y.A. RACINE et al. (1992). "Outcome, Prognosis and Risk in a Longitudinal Follow-up Study." *Journal of the American Academy of Child and Adolescent Psychiatry*. Vol. 31, 916-23.
- OFFORD D.R., M.H. BOYLE and P. SZATMARI (1987). "Ontario Child Health Study: II. Six-month Prevalence of Disorder and Rates of Service Utilization." *Archives of General Psychiatry*. Vol. 44, 832-36.
- OFFORD, D.R. and E.L. LIPMAN (1996). "Emotional and Behavioural Problems". In *Growing Up in Canada*. Ottawa: Statistics Canada, Catalogue No. 89-550-MPE, no. 1.
- PHIPPS, Shelley and Peter BURTON (1992). "What's Mine Is Yours? The Influence of Male and Female Incomes on Patterns of Household Expenditure." Working Paper No. 92-12, Department of Economics, Dalhousie University.
- RUTTER, M. (1992). "Adolescence as a Transition Period: Continuities and Discontinuities in Conduct Disorder." *Journal of Adolescent Health*. Vol. 13, 451-60.
- SAIGAL, S. and P. SZATMARI (1991). "Cognitive Abilities and School Performance of Extremely Low Birth Weight Children and Matched Term Control Children at Age Eight Years: A Regional Study." *Journal of Pediatrics*. Vol. 118, 751-60.
- SCHULTZ, T. Paul. (1990). "Testing the Neoclassical Model of Family Labor Supply and Fertility." *Journal of Human Resources*. Vol. 25, 599-634.
- THOMAS, Duncan (1990). "Intra-Household Resource Allocation: An Inferential Approach." *Journal of Human Resources*. Vol. 25, 635-64.
- WEISSMAN M., P. LEAF and J.L. BRUCE (1987). "Single Parent Women." *Social Psychiatry*. Vol. 22, 29-36.
- WHITE, H. (1980). "A Heteroskedasticity-Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity." *Econometrica*. Vol. 50, 1-25.





## Chapter 8

# Intergenerational Aspects of Education and Literacy Skills Acquisition

PATRICE DE BROUCKER AND LAVAL LAVALLÉE

---

Education and skill levels are important dimensions of an individual's ability to integrate with and contribute to society. They not only help determine one's social position, but also impact on the economy by increasing both the size and quality of the labour force. Getting an education, in the broadest sense, is the result of many influences, but the family and the education system carry considerable weight in this process. Indeed, from a public policy perspective, education policy is a powerful instrument with which to influence human capital formation.

In this chapter, we assess the family's role in determining the acquisition of higher education and literacy. More specifically, our objective is to relate individual educational attainment, literacy abilities, and labour market characteristics to parental educational and labour market attributes. We compare different age cohorts and thereby examine relationships between parents and children over more than one generation. In doing so we focus on the following questions:

- [1] Do families pass on their intellectual capital to the next generation, and has the pattern of educational mobility changed over time?
- [2] Are literacy skills associated with educational attainment, and do they play a role in educational mobility and in gaining access to training opportunities?
- [3] Does the labour market experience of parents influence their ability to pass on intellectual capital to their children?
- [4] Do literacy skills enhance occupational opportunities?
- [5] Do the parents' education levels influence the strategies they use to influence their children's education?

Our analytical starting point is the notion that education and literacy are important in

determining how well people integrate with various facets of society, and how likely they are to have successful working lives. We also emphasize that access to training opportunities (to upgrade skills and knowledge) throughout one's lifetime is important to maintain and improve one's socio-economic situation and overall economic well-being. Educational attainment is largely achieved through the working of the education system but also by inherited intellectual capital, which is in large part acquired at home through the interaction of family members. This interaction directly affects one's educational performance by offering a supportive environment for learning. Intellectual capital, forged within families through the generations, also has an indirect influence on educational attainment. Intellectual capital is defined as the experience and knowledge acquired by an individual or a group of individuals (such as the family) during the course of their lives that can be applied in the pursuit of economic and social goals. It may pave the way for better educational attainment and a more fruitful adult life. On the other hand, this would also imply that some children may not be starting school on an equal footing. The role of an efficient education system is to provide children whose parents have relatively lower levels of education, opportunities similar to their counterparts from more educated families.

Our major findings are: [1] there is substantial upward educational mobility, but inherited intellectual capital still makes a significant difference in individuals' ability to access and succeed in post-secondary education; [2] parents' occupational experience, in addition to their education, also influences the educational attainment of their children; and [3] how parents support the education of their children reflects their own educational background, with more educated parents adopting strategies more likely to set their children on a successful path.

## 1. Overview

Our analysis is based upon the International Adult Literacy Survey (IALS). This survey questioned individuals from a number of advanced industrial countries in 1994 with the following objectives: "[1] to shed light on the relationship between performance, educational attainment, labour market participation and employment for those individuals found to be able to read but not able to do so very well; [2] to compare and contrast the literacy skill profiles for economically important sub-populations across countries and language groups" (Statistics Canada 1996, p.10).

We use the information obtained from a representative sample of 5,660 Canadians, and focus upon two separate age cohorts, those 26 to 35 and those 46 to 55. The 26 to 35 age bracket is used because people from this cohort are at the beginning of their careers but have completed their initial education. The 46 to 55 age cohort are on average 20 years older (but not old enough to represent the parents of the younger cohort), and still in the labour market. The age difference between the two cohorts distinguishes one generation from another. The older cohort went through the education system in the late 1940s and the 1950s, while the younger group was in formal education during the 1970s and the 1980s. In the IALS sample there are 1,010 Canadians 26 to 35 years (representing a population of about 5 million), and 658 who are 46 to 55 (for a population of about 3.3 million).

Intergenerational mobility analyses have very demanding data requirements. Sample size limitations have, for example, forced us to consider four levels of education for the survey respondents (secondary not completed, secondary, post-secondary non-university, university), and three levels for their parents (secondary not completed, secondary, post-secondary). When information is missing on the educational attainment of both parents, the individual is excluded from the analysis.<sup>1</sup>

In our analysis "literacy" relates to only one of the three measures available in IALS: document literacy. This term refers to the ability to use information from documents such as payroll forms, job applications, maps, bus schedules, and graphs. This type of literacy measure can be interpreted as comprising elements of both prose literacy (the ability to use information such as editorials, poems, fiction and news bulletins) and quantitative literacy (the ability to perform arithmetic functions of various sorts), which also

appear in the IALS. We often refer to a distinction between a "high literacy" level and a "low literacy" level. Scores have been translated into five levels, and we take high literacy level to be levels three to five. Performing at level three implies an ability to cope with varied tasks of some complexity. (An extensive description of the test material and the definition of the literacy levels is provided in Statistics Canada 1996.)

Much of our analysis deals with the relationship between one's educational attainment (and some of the associated labour market benefits) and inherited intellectual capital, represented by the educational attainment of the respondent's mother or father, and occupational status of the father. The only information available in the IALS data about the mother's labour market activity is whether she ever worked at a job or business. The respondent was asked more questions about the father's activities, specifically occupation and industry.

We are also in a position to examine different parental educational strategies, such as deliberately building on or accumulating greater intellectual capital for children. Those still in school are left out of the analysis because our concern is with the last level of education attained by the respondents.<sup>2</sup>

The major characteristics of the two age groups we study are presented in Table 8.1. Panel A of the table reveals that the younger generation has attained higher levels of education than the older, and that the major difference is in the proportion graduating from high school and from non-university post-secondary education institutions. This is largely because there was a major expansion of the college system during the last twenty years. University attainment is, by comparison, only marginally higher. That being said, it is possible that some 26 to 35 year olds will return to university and achieve a higher level of education (likely a university degree) even though they were not enrolled at the time of the survey.

The percentages in Panel B reveal that about 62% of the younger generation perform at literacy skill Level 3 or higher, as compared to 46% of the older generation. The fact that there are a number of young people with relatively higher literacy skills is only a moderate consolation given that the proportion with weak literacy skills remains high. The lower performance of the older generation may be attributed to either low skills at a young age (and still having low skills), or the depreciation of skills over time.

Table 8.1  
**Education, Literacy and Occupation by Age**

	26 to 35 Years	46 to 55 Years	All Ages
	(Percent)		
A. Educational Attainment			
Secondary Not Completed	22.6	36.8	33.9
Secondary	38.4	32.4	33.5
Post-Secondary, Non-University	22.9	15.2	17.1
University	16.1	15.7	15.5
B. Document Literacy Level			
Level One	13.6	23.0	23.9
Level Two	24.9	31.0	23.9
Level Three	33.9	23.6	29.9
Levels Four and Five	27.6	22.4	22.3
C. Occupation			
Managers	5.8	11.3	7.9
Professionals	21.0	18.2	17.3
Technicians	15.3	11.2	11.6
Clerks	16.1	12.3	14.6
Service	13.4	18.0	15.1
Blue Collar	28.3	29.0	33.5

**Source:** Authors' calculations from Statistics Canada, International Adult Literacy Survey.

Finally, the information in Panel C shows the distribution by occupation of all the labour force participants in the two age cohorts. There are proportionately more people from the older generation in the managerial occupations, but a greater proportion of people from the younger generation in professional and technician occupations. This reflects the fact that managerial occupations require experience that most young people do not yet have. It also reflects the fact that the rising level of education allows young people to enter the workforce in highly skilled occupations in larger numbers. Clerical occupations remain an entry level occupation for many young people. It is also interesting to note the importance of the blue collar occupations among young workers (this group includes craft and trade workers, skilled agricultural and fishery workers, plant and machine operators and assemblers, armed forces and elementary occupations); this is not what one would suspect to happen in an economy characterized by a decline in the relative number of manufacturing jobs, and rapid growth of the service economy.

## 2. Intergenerational Education Mobility

One of the factors determining how much education an individual receives is the level of

parental education. A highly supportive learning environment at home (proxied by the level of parental education and the occupation of the father) is likely to be reflected in children attaining higher educational levels. A supportive environment manifests itself not only through a financial capacity to support children's higher education, but also through day-to-day interactions of higher "intellectual quality" between parents and children.

To what extent is the education of the respondents in our survey related to that of their parents? In order to address this issue, we derive Spearman rank correlations between respondent education (by gender and age) and the education of fathers and mothers. The results show that there is no significant difference in the relationship between respondent education and that of either of their parents. The correlation coefficients vary between about 0.38 and 0.45, but are always about the same whether the mother's or the father's education level is used. In fact, the correlation is consistently stronger between the level of respondent education and that of the parent with the highest level of education (varying between 0.40 and 0.53). In addition, the correlation between the levels of education of the two parents is always higher than the correlation across generations, attaining values as high as 0.66.



Table 8.2

Percentage of Individuals with More, the Same or Less Education than Their Parents:  
by Parental Level of Education and Respondent Age

	Secondary Not Completed			Secondary			Post-Secondary			Total		
	More	Same	Less	More	Same	Less	More	Same	Less	More	Same	Less
	(Percent)											
26 to 35 Years	84.1	14.8*	-	40.0*	46.4*	-	-	44.9*	40.4*	50.9	33.5	15.7*
46 to 55 Years	77.0	19.8*	-	41.0*	52.6*	-	-	47.2*	44.6*	57.6	32.2*	-
Total	74.3	23.0	-	41.4	44.1	14.5*	9.1*	37.4	53.5	51.0	31.8	17.2

\* High but acceptable coefficients of variation.  
- Coefficient of variation too high for the number to be reliable.

Given these results the education of the parent with the highest level of education is used in the remainder of our analysis. Table 8.2 collects all the main elements of three educational mobility matrices, one for the total population (less the full-time students) and one for each age cohort. Sample size limitations prevent the reporting of population sub-groups. However, the data is sufficiently reliable to provide a picture of intergenerational educational mobility in Canada.<sup>3</sup> Educational mobility, measured as the difference in educational attainment between parents and their children, is important in Canada: more than two-thirds of Canadians have a different level of education than their parents. About 51% have a higher level of education than their parents, while 17% have a lower level. As a result the average level of educational attainment in the population is rising over time. Naturally, the lower the parents' level of education, the higher is the scope for upward mobility, and concomitantly the higher is the rate of upward mobility. Indeed, about three out of four respondents whose parents have not completed secondary school have gone at least a little further in their education. Undoubtedly the establishment of compulsory schooling and the subsequent rise in the age of compulsory school attendance have had a significant influence on this accomplishment. However, only slightly more than 40% of the respondents whose parents have just graduated from high school have achieved a higher level of educational attainment. (Fournier et al. 1995 offer similar results.)

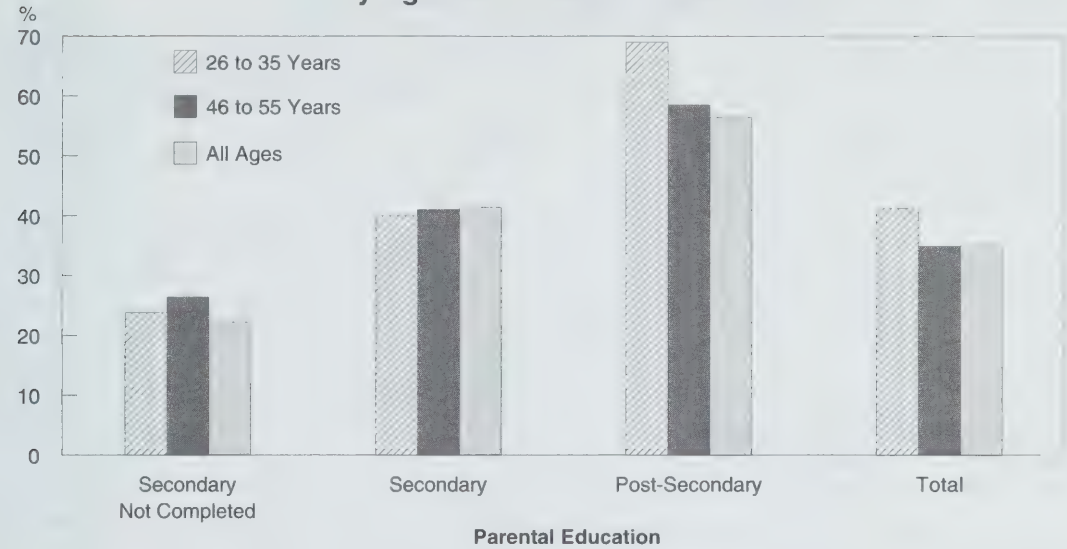
Differences in educational attainment between the two age cohorts are not too pronounced. Upward mobility for respondents whose parents did not complete secondary school is higher among the younger cohort. Overall, however, upward mobility is slightly higher in the older

cohort. This is to be expected as more people move towards higher levels of education.<sup>4</sup> Given that the general level of education in the population gradually increases, it becomes more difficult to surpass one's parents' education, even in the context of a more and more accessible educational system.

The probability of obtaining at least a post-secondary education by level of parental education is illustrated in Figure 8.1. The higher the education of the parents, the higher the probability of obtaining post-secondary education credentials. Indeed, people with parents who have a post-secondary certificate or degree are 2.5 times more likely to obtain at least a post-secondary degree, than those whose parents have not completed high school. The younger generation are close to three times more likely to obtain a post-secondary education if their parents had a post-secondary degree compared to those whose parents did not complete high school. For the older generation, this proportion is about 2 to 1.

The data in this figure provide the first hints that the polarization of educational opportunities may be increasing. A comparison of the two cohorts suggests that access to and success in post-secondary education is significantly on the rise for individuals whose parents have themselves attained post-secondary education, while the situation of respondents whose parents' education did not go beyond high school has not improved, and indeed may have deteriorated. The contrast by parental education is even more pronounced if one restricts the comparison to only those attaining a university education. This supports the fact that colleges, as post-secondary education institutions, have helped improve access to post-secondary institutions, especially for those with minimal inherited intellectual capital.

Figure 8.1  
Probability of Attaining at Least Post-Secondary Education:  
by Age and Parental Education



In order to identify those factors that affect the schooling experience of respondents we use an ordinary least square regression and regress the number of years of formal education completed by the respondent on a number of relevant factors. The aim of this analysis is to measure the influence of various factors in a controlled environment, and to explore further the hypothesis of polarization. The variables included are gender (since the propensity to attain certain levels of education may differ by gender), age (to capture the cohort effect), and parental education. We also include the occupation of the father as a proxy for the influence the parents' labour market experience may have on children's educational attainment, over and above the direct effect of their own level of education.

The variable **mother ever worked** is also included. As mentioned, this variable refers to whether or not the mother ever worked at a job or business. We also suspect that educational attainment can in part be explained by whether or not individuals were born in a specific region of Canada or abroad, or lived in a rural setting. Further education may be hampered by distance and isolation of smaller communities. Accordingly controls for the region of birth and urban/rural setting are also used.

The results are depicted in Table 8.3. The most relevant findings are the following:

[1] Parental education makes a difference: individuals whose parents have not completed

secondary school have on average 1.5 years of education less than those whose parents graduated from high school. Individuals whose parents obtained a post-secondary diploma or degree have three-quarters of a year more of education.

[2] There may be a case for polarization of educational opportunities. The younger age cohort whose parents have not completed their high school have about the same parameter estimate as the older generation, but those from the younger cohort whose parents obtained a post-secondary education have significantly more education than their older counterparts.

[3] The occupation of the father has a strong influence on the years of schooling. Those with a father who was a professional have up to 3.5 more years of education than those with a father who was a skilled agricultural worker.

[4] One obtains significantly higher education if the mother worked. This does not seem to affect significantly schooling of the older cohort.

[5] The province of birth—and likely the province where most of the education is received—makes a difference: in Quebec, individuals have about one year less education than in Ontario, while the difference is about two-thirds of a year less in the Atlantic provinces and close to half-a-year less in the West.

Table 8.3  
**Determinants of the Number of Years of Education:  
 Least Squares Regression Results by Age**

	Total Population	26 to 35 Years	46 to 55 Years
	(Number of Years of Education)		
Reference Case	11.66*	12.79*	11.90*
Gender (Women)			
Men	0.05	-0.05	0.68**
Age (56 to 45 Years)			
16-25	-0.32**		
26-35	0.06		
46-55	-0.02		
56 +	-1.67*		
Parental Education (Secondary Completed)			
Secondary Not Completed	-1.62*	-0.95*	-1.42*
Post-Secondary	0.65*	1.16*	-0.43
Father's Occupation (Skilled Agricultural Worker)			
Armed Forces	2.50*	4.30*	-1.41
Managers	2.72*	1.31*	3.53*
Professionals	3.59*	1.87*	5.90*
Technicians	1.93*	0.20	3.02*
Clerks	2.10*	1.16**	3.36*
Service Workers	1.79*	-0.06	1.72*
Craft Workers	1.13*	-0.75***	1.33*
Plant and Machine Operators	0.91*	-0.58	0.87**
Elementary Occupations	0.56*	-1.08**	0.72
Never Worked	2.70**	2.96	0.00
Don't Know	-0.16	-1.90**	-0.86
Not Stated	3.13*	-1.19	9.93*
Mother Ever Worked	1.09*	0.89*	-0.52***
Rural	-0.46*	-0.41	-0.36
Region of Birth (Ontario)			
Abroad	-0.28***	-0.89*	0.71
Atlantic	-0.81*	-0.11	-1.49*
Quebec	-1.25*	-0.41	-2.33*
West	-0.42*	-0.49***	0.13
Adjusted R <sup>2</sup>	0.3051	0.2478	0.4392
F-statistic	82.7	15.5	23.1
Number of Observations	4,650	924	566

**Note:** The reference categories are indicated by the parentheses ( ). For the results in the first column the reference category is women, 36 to 45 years of age, whose parent with the higher level of education had completed secondary school, whose father was a skilled agricultural worker, whose mother did not work, living in an urban area, and born in Ontario. The reference case for the results in the remaining columns is women, whose parent with the higher level of education had completed secondary school, whose father was a skilled agricultural worker, whose mother did not work, living in an urban area, and born in Ontario.

\* significant at 99% level.

\*\* significant at 95% level.

\*\*\* significant at 90% level.



Table 8.4  
**Literacy, Education, and Adult Training**

	26 to 35 Years	46 to 55 Years	All Ages
	(Percent)		
<b>A. Attainment of High Literacy Skills</b>			
Secondary Not Completed	30.1	17.5	19.9
Secondary	54.0	50.1	57.9
Post-Secondary, Non-University	83.0	76.2	74.6
University	92.3	77.0	86.1
<b>B. Variation in Literacy Level*</b>			
Secondary Not Completed	26.3	28.9	33.0
Secondary	17.4	18.3	19.0
Post-Secondary, Non-University	14.3	16.2	17.1
University	15.1	13.3	15.3
<b>C. Participation Rate in Adult Education and Training</b>			
High Literacy Skills	51.6	46.8	50.7
Low Literacy Skills	24.1	21.4	20.6
Total	41.0	33.2	36.3

\* Coefficient of variation of literacy levels within groups.

When we compare the two cohorts, a more precise picture emerges: the regional differences are much larger (especially for Quebec and the Atlantic provinces) among the older cohort, and have practically disappeared with the younger age cohort.

In summary, the average level of education in the population has increased: 50% of the respondents had attained a higher level of education than their parents. However, precisely because a growing share of the population attains the highest level (university), the possibility of moving upward is progressively shrinking. This is the main reason why only 51% of the respondents in the younger cohort experienced upward educational mobility, while 58% of people of the older cohort did. Inherited intellectual capital makes a considerable difference in children's achievements. Slightly more than one third of respondents attained a post-secondary level of education, but this population was not equally distributed by the level of parental education. While 56% of those with parents having post-secondary education attained this level of education, this was the case for only 22% of those whose parents did not graduate from high school. Over time, polarization seems to have increased: those who have parents with post-secondary education are in a better position to go on to post-secondary education (their probability rises to 69%, whereas it is only 58.5% for the older cohort). The fate of those with less educated parents remained unchanged.

### 3. Literacy Skills and Educational Attainment

Literacy skills provide another facet for explaining the relationship between parental education and that of children. It is also a factor likely to play a role in permitting access to further education opportunities in adulthood. In general, literacy levels increase with the level of educational attainment (Table 8.4, Panel A). The fact that the skill levels are generally slightly lower for the older generation than the younger one may be due either to a lower initial level of skills or to a depreciation of skills over time particularly when these skills are not used regularly in day-to-day activities (Statistics Canada 1996: p. 37). The intergenerational differences are more apparent at both extremes of the education spectrum. Low literacy levels among those with lower levels of education compound further their fate. Less than a third of 26 to 35 year olds who left high school without graduating attain literacy at level 3 or higher. This jeopardizes their chances of higher occupational accomplishments and reduces their ability to adjust to the changing socio-economic environment. In contrast, 92% of the young university graduates and 83% of the college graduates benefit of high literacy skills.

The data in Panel B of Table 8.4 demonstrate that, on the whole, people with high levels of education may have low levels of literacy skills and people with low levels of education may have high levels of skill acquisition. However, these

variations are decreasing with higher levels of education, and they are also somewhat higher for the older generation. This seems to confirm the loss of skills by a number of individuals in that age bracket in an environment not prone to maintaining individual skill level. The decline in the coefficient of variation for the younger cohort is less pronounced than for the older generation. This suggests that, over time, the variations in literacy levels are likely to decrease as there is a general increase of educational attainment in the population through better educated young cohorts.

Finally, Panel C of the table measures the additional advantage that a high level of literacy provides in accessing further training opportunities. The rate of participation in adult education and training is more than twice as high as for individuals who had high literacy skills than it was for those with low skills. This pattern is consistent across age groups. This suggests that adult training, by virtue of the working of the labour market, is not—or rarely—an instrument that allows workers with limited initial education and skills to improve substantially their educational situation.

We proceed as in the previous section by analyzing the influence of selected factors on literacy achievement. To do this, we use a least square regression of the document literacy scores (the actual individual literacy scores rather than discrete levels) on a number of relevant factors. These independent variables are the same as in the analysis of the number of years of schooling. The impact of these factors on the literacy scores is depicted in Table 8.5. Overall, men have a marginally higher level of literacy than women; younger people have a markedly higher level than their older counterparts. The education of the parents also makes a sizeable difference on literacy scores of respondents, particularly if parents had not completed high school. In comparison with skilled agricultural workers, literacy scores are affected positively for almost all other occupations. These can be grouped into two clusters: the professional occupations (managers, professionals, technicians, clerks) leading to the highest positive difference with a 40 to 50 point advantage and the service and blue collar occupations with an advantage of about 25 points. The fact that the respondent's mother works appears positively associated with higher literacy scores. In terms of the regional differences, literacy scores appear to be slightly higher in Ontario and Western Canada than in Quebec and the Atlantic provinces. This

is consistent with the distribution of educational attainment observed in the previous section.

The results confirm that, other things being equal, young people achieve higher literacy scores. The literacy score is higher by about 50 points on a scale that goes from 0 to 500. This is a substantial increase and implies that individuals are moving from level 2 to level 3 in the literacy classification. Men of the older generation had a literacy advantage over women, but this disappears in the younger generation. The influence of the father's occupation also diminishes significantly from the older generation to the younger.

Undoubtedly, literacy skills are linked to educational attainment. As one might expect, the higher the educational attainment, the higher the average level of literacy. However, there is a fairly wide dispersion of literacy skills around the average at all levels of education. Such variations tend to be wider for older cohorts. This supports the notion that literacy skills may depreciate when such skills are not used in daily activities. Literacy skills are also a strong co-determinant of access to further training opportunities. At any given level of education, individuals with higher literacy skills also have a higher probability of participating in adult education and training courses.

#### 4. Socio-Economic Background

Taking stock of the main findings of the previous two sections, we look at the relationships between labour market experience, education and literacy skills, adding the intergenerational dimension by measuring the influence of the father's occupation.

A variable that represents socio-economic scores of occupations (SES) is used to measure labour market outcomes. This allows us to minimize problems associated with high sampling variability in some occupations. To do so we rely on an often used measure of the relative "importance" of an occupation.<sup>5</sup> The scale varies from a low of about 25 to a high of about 62, which is equivalent to a difference of 37 points between the occupations scoring the lowest and the highest.

The data in Panel A of Table 8.6 shows that socio-economic occupational status increases significantly by level of education. The marginal benefits of education seems to rise as the level of education increases (as measured by the

Table 8.5  
**The Determinants of Document Literacy Scores:  
 Least Squares Regression Results by Age**

	Total Population	26 to 35 Years	46 to 55 Years
Reference Category	247.2*	308.5*	260.2*
Gender (Women)			
Men	4.8**	-7.0	18.0*
Age (36 to 45 Years)			
16-25	12.2*		
26-35	12.8*		
46-55	7.1**		
56 +	-19.4*		
Parental Education (Secondary Completed)			
Secondary Not Completed	-28.9*	-27.2*	-20.8*
Post-Secondary	2.3	2.5	-28.3*
Father's Occupation (Skilled Agricultural)			
Armed Forces	67.1*	104.1*	-15.3
Managers	44.2*	19.8**	25.2**
Professionals	50.6*	38.0*	47.6*
Technicians	43.6*	11.8	31.7***
Clerks	41.6*	25.2**	46.7**
Service Workers	24.8*	1.1	3.5
Craft Workers	23.4*	-13.1	2.3
Plant and Machine Operators	25.3*	-9.4	8.2
Elementary Occupations	4.3	-23.7**	-3.3
Never Worked	22.3	15.1	0.0
Don't Know	-16.5*	-52.2*	-63.3*
Not Stated	30.0**	-35.72	-6.62
Mother Ever worked	27.8*	11.3**	13.1**
Rural	4.7**	-3.4	-0.3
Region of Birth (Ontario)			
Abroad	-26.9*	-33.9*	4.7
Atlantic	-10.4*	-13.9***	-8.3
Quebec	-12.1*	-12.6**	-11.9
West	1.8	-9.9	13.9
Adjusted R <sup>2</sup>	0.266	0.196	0.138
F statistics	68.3	11.7	5.51
Number of Observations	4,650	924	566

**Note:** The reference categories are indicated by the parentheses ( ). For the results in the first column the reference category is women, 36 to 45 years of age, whose parent with the higher level of education had completed secondary school, whose father was a skilled agricultural worker, whose mother did not work, living in an urban area, and born in Ontario. The reference case for the results in the remaining columns is women, whose parent with the higher level of education had completed secondary school, whose father was a skilled agricultural worker, whose mother did not work, living in an urban area, and born in Ontario.

\* significant at 99% level.

\*\* significant at 95% level.

\*\*\* significant at 90% level.



Table 8.6  
Socio-Economic Occupational Score

	26 to 35 Years	46 to 55 Years	All Ages
	(Socio-Economic Score)		
A. Education Level			
Secondary Not Completed	34.1	33.9	33.0
Secondary	38.5	42.0	37.8
Post-Secondary, Non-University	43.5	49.8	42.2
University	51.5	50.6	49.1
Total	40.8	41.6	38.6
B. Document Literacy Level			
Level 1	33.3	34.8	32.4
Level 2	37.5	38.7	36.8
Level 3	40.7	42.0	40.6
Level 4/5	47.5	51.8	45.0
Total	40.8	41.6	38.6

**Note:** The socio-economic occupational score is taken from Blishen et al. (1987) and is based on the level of education, income, and ratio of women in the occupation as defined in the 1981 Census.

average socio-economic occupational score). Individuals with a high school diploma gain about five points over those who did not complete high school. In comparison, individuals with a university degree have a seven point edge over those with a non-university education. At all levels of education, except the university level, the older cohort has an edge over the younger cohort in terms of socio-economic occupational status. The likely explanation for this is that the older generation draws its advantage from accumulated experience, thus allowing them to benefit from promotions. As expected, the higher the level of education, the higher the difference in the advantage of the older cohort in terms of the socio-economic occupational status attained. The exception to this rule is the group of people having acquired a university degree. At the university level the older generation is on a par with the younger cohort. If the highly educated young people cannot claim the seniority or experience to rise to top management jobs, their presence is well noted among the professionals and highly skilled technicians.

Panel B of the table provides a similar picture, describing the relationship between socio-economic occupational status and the level achieved in document literacy. For both cohorts, the largest occupational gains are obtained when the workers are at the highest level of literacy. High levels of education as well as high levels of literacy are well rewarded in the labour market, and there does not seem to be any substantial

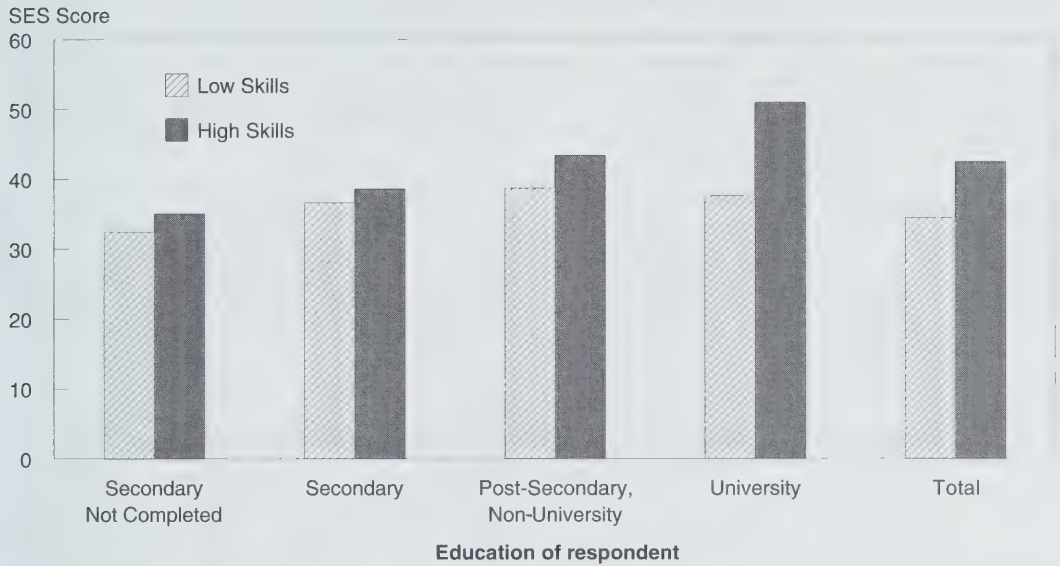
difference over time, other than what can be explained by the experience acquired with age or seniority.

As a result the following question is raised: do literacy skills enhance further occupational opportunities above and beyond their impact through educational attainment? Figure 8.2 leaves no doubt about the answer. As expected socio-economic occupational status increases with the level of educational attainment, but this is further compounded by increasing literacy skills. The difference in socio-economic scores between low and high literacy skills also increases as the level of educational attainment increases. Hence, literacy skills play an important role in the determination of labour market outcomes.

Does the labour market experience of parents affect the intellectual capital passed on to their children? To address this issue we examine whether (at a given level of paternal education) the occupation of the father explains the educational attainment of children. In other words, fathers with a low education may have had good opportunities in the labour market and risen to occupations with a fairly high occupational status score. Would this situation be reflected in somewhat higher educational attainment of their children and does this contrast with the educational outcomes of children whose fathers had the same level of education and a job in an occupation with a lower socio-economic score?

Figure 8.2

### Socio-Economic Occupational Score by Level of Educational Attainment and Document Literacy Skill Level of Respondent



In Table 8.7 the average socio-economic occupational status scores of fathers are cross-classified by paternal education and child education. If the father's occupation at a given level of education makes a difference to child education outcomes, then we would expect that on average the father's socio-economic status score (at any given level of education) to be higher as the child's level of education increases. This is actually the case. Respondents achieve higher educational outcomes concomitant with higher paternal socio-economic occupational scores at any level of paternal education. At each level of paternal education the gap in the socio-economic score between child outcomes at secondary not completed and university has a magnitude of about six points, approximately one-sixth of the full scale of scores.<sup>6</sup>

These results show that the labour market experience of parents (as measured by the occupational status) has an influence on the children's educational attainment. Fathers with low levels of education who have managed to rise to high status occupations are better able to offer their children an environment where they could achieve higher levels of education. On the other hand, fathers who, despite their high level of educational attainment, are in low status occupations (for their level of education) are more likely to have children with relatively lower education.

## 5. Education Support Strategies

How do these patterns come about? Do parents with higher education demonstrate strategies that are known to positively influence success in school? We hypothesize that the transmission of intellectual capital within the family is reflected in educational investment strategies that may materialize in different ways. The IALS identifies those individuals having children between 6 and 18 years, and offers a number of variables that can be related to parenting strategies. We attempt to uncover a relationship between parental education and some proxies that may reflect the ability of parents to further their child's education.

We use a series of logistic regressions that relate a specific activity to parental education and a number of additional factors for which it seems relevant to control. The sample is restricted to parents who say that they have at least one child between 6 to 18 years presently living with them (the sample size is 1,161). Five educational activities or characteristics of the children's early experience are examined: [1] whether parents buy the books their children read; [2] whether the children are limited by parents in the amount of time they are allowed to watch television; [3] whether the children have a certain amount of time set aside each day for reading at home;

Table 8.7  
Socio-Economic Occupational Score of the Father,  
by Education Levels of Father and Child

Father's Education	Child's Educational Attainment				Total
	Secondary Not Completed	Secondary	Non-University Post- Secondary	University	
(SES Score)					
Secondary Not Completed	33.3	36.4	35.3	39.3	35.2
Secondary	38.1	39.8	43.3	44.5	41.5
Post-Secondary	43.6	47.6	46.8	49.8	47.9
Total	34.4	38.5	39.7	44.4	38.2

Table 8.8  
The Probability of Using Parenting Strategies Important for Child Education  
Outcomes

	Parents Buy Books	Child Read Before Grade One	Limit TV to Children	Time Set Aside to Read	Child Failed at School
Parent's Age					
16 to 25 Years	85.0	38.6	89.3***	68.2	n.a.
26 to 35 Years	82.2*	50.2	58.1	52.2	1.2**
<b>36 to 45 Years</b>	<b>68.3</b>	<b>51.8</b>	<b>54.9</b>	<b>47.6</b>	<b>3.1</b>
46 to 55 Years	57.5***	71.2*	50.6	47.9	13.3*
56 and Older	61.9	13.5*	50.9	44.5	25.7*
Parental Education					
Primary	61.8	59.5**	48.0	48.7	4.8
<b>Secondary</b>	<b>59.5</b>	<b>48.1</b>	<b>55.8</b>	<b>42.9</b>	<b>4.1</b>
Post-Secondary, Non-University	77.7*	53.6	62.3	43.2	1.9
University	92.5*	53.5	59.4	67.7*	1.1**
Family Income					
Bottom Quintile	61.7	44.7	59.3	42.9	9.9**
Second Quintile	87.5*	51.6	56.8	55.9	11.4**
<b>Third Quintile</b>	<b>72.6</b>	<b>41.2</b>	<b>66.8</b>	<b>43.3</b>	<b>6.6</b>
Fourth Quintile	71.8***	71.3***	45.1**	54.1	0.2
Top Quintile	64.0	49.6	53.7	48.4	3.8**
Child's Current Education Level					
Primary	79.3*	55.3*	64.1*	56.3*	3.6**
<b>Secondary</b>	<b>57.2</b>	<b>48.8</b>	<b>39.4</b>	<b>36.7</b>	<b>1.9</b>
Location					
Rural	84.5*	44.0*	64.2**	47.3	1.8***
<b>Urban</b>	<b>68.7</b>	<b>55.5</b>	<b>53.4</b>	<b>50.0</b>	<b>3.3</b>

**Note:** Table entries are estimated probabilities from a logistic model. The detailed estimation results are available from the authors upon request.

\* significantly different from reference group (in bold) at 99%.

\*\* significantly different from reference group at 95%.

\*\*\* significantly different from the reference group at 90%.

n.a.: Because of the manner in which the dependent variable is created, the 16 to 25 year age group is not relevant, and has been omitted from the regression.



[4] whether the children learned to read before grade one; [5] whether the children failed at school (cumulated at least two years behind the normal grade for their age). We control for the age group of the parents, their level of education, the family income (classified by quintiles), whether the child was in elementary or secondary school, and whether the family lived in an urban or rural setting.

Table 8.8 provides the probabilities derived from the regressions. (The detailed results are available upon request.) Higher education implies that parents are more likely to buy books for children to read. The likelihood that a child fails a grade is also substantially reduced when parents have higher levels of education. As for time set aside to read, it seems that only university educated parents pay a lot more attention than all others. At the same time it is interesting to note that more attention is paid to reading time when the child is in primary school, the formative years for learning to read. There does not seem to be a clear strategy towards limiting TV watching time, but one may assume that this time may be limited *de facto* by the time consumed in other activities such as reading, without any need for parental intervention. Parental intervention is more frequent with younger children, those enrolled in primary school. Learning to read before grade 1 is not associated with an attitude specific to parents of a certain level of education: about one child of every two start learning to read before entering grade 1, whatever the parents' educational attainment. One may see in this an effect of the extension of pre-school experience that cuts across the educational background of parents.

In summary, parental support of children's education is a reproduction of their own educational background. One limitation of this analysis is that we are unable to analyse the final educational outcome of those strategies, that is the children's educational attainment. The only firm conclusion from our analysis is that parents with higher levels of education tend to set their children on a successful path.

## 6. Conclusion

In this chapter we examine some inter-generational aspects of the transmission of intellectual capital. Our point of departure is that inherited intellectual capital likely plays a significant role in the ability of children to match or improve upon their parents' educational attainment.

Our main conclusions are the following. [1] There is substantial upward educational mobility; about half of the children in our sample attain higher levels of education than their parents. [2] The rate of upward educational mobility is "naturally" declining as more people move to the highest level of education, thus reducing the number of children that can outstrip their parents' level of education. [3] Inherited intellectual capital makes a lot of difference given that it is much more difficult for children whose parents have not completed high school to attain college or university level than it is for children whose parents have obtained a university degree. However, there seems to be evidence that the expansion of the college system has provided opportunities for some to reach post-secondary education. [4] The relative gap between children whose parents are at both extremes of the educational attainment spectrum does not seem to close as time goes by. There are even signs that the polarization of educational opportunities is on the rise. [5] Literacy skills largely reflect educational attainment. However, at given levels of education, literacy scores show wide variations. These widen as age increases, indicating a possible loss of literacy skills when such skills are not regularly put to use. [6] In addition to educational attainment, literacy is a significant predictor of one's participation in adult education and training. [7] Besides education, experience gained at working in some occupations may be an important addition in the transmission of intellectual capital. [8] Literacy skills also enhance one's ability to move up the occupational ladder. [9] Parents' educational investment strategies reflect their own educational background and the need to perpetuate their knowledge and education to their children. Parents with high levels of education adopt more often strategies to set their children on a success path than parents with less education.

Undoubtedly, the family is an essential locus for the transmission of intellectual capital. The family can bring hope to some or it can perpetuate intergenerational inequities. Is the education system up to the challenge of providing education opportunities that so many need? Is the education system able to provide equal opportunities to all? A wide range of government policies touch on issues related to the importance of human capital for the development of our society and the success of our economy: education and labour market-related information and counselling, accessibility to higher education, income support for further education and training, adequate child care facilities, economic and

employment security. Are these policies set in place to cater to the needs of those whose horizon might be limited by virtue of birth? Recently, a Canadian university advertised on a commercial billboard using those words: "Not everyone inherits the family business. No one's about to hand you your future." In fact, it seems that the future of many Canadians is, to a large part, in the hands of their parents.

Notes

We wish to thank Jac-André Boulet, Emile Allie, and an anonymous referee for their useful comments on earlier versions of this chapter, as well as René Morissette for technical assistance.

- <sup>1</sup> This implies that 17.1% of male respondents and 14.5% of female respondents are not included in the analysis. There was no attempt to impute missing data, nor to reweight after exclusion of observations with missing information. An appendix available upon request examines the distribution of respondents not knowing their parents education and not stating their own or their parents' level of education in more detail.
- <sup>2</sup> This involves excluding a total of 303 individuals (or 5.3 % of the sample). Of these, 295 individuals are between the ages of 16 to 25, five are between 26 and 35 years (3.5%), and three are 36 to 45 years (0.5%).
- <sup>3</sup> The original data in the survey classify educational attainment in seven or eight categories. We have used these categories to determine the number of "educationally mobile," but we have aggregated the results in three categories of parents' education to produce the estimates.
- <sup>4</sup> The rising proportion of people obtaining post-secondary credentials is borne out by the following figures:

	Parents of Older Cohort	Parents of Younger Cohort	Older Cohort	Younger Cohort
Proportion with Community College	9.1	11.9	15.2	22.9
Proportion with University	5.9	14.4	15.7	16.1

These numbers relate to proportions, but given that there was a large increase in the population over the last decades, they imply that a considerable number of people went into post-secondary institutions and completed their

- degrees. The increase in the proportion of parents in the two cohorts with a post-secondary education is sufficient to explain the reduction in the potential for upward mobility between the two cohorts.
- <sup>5</sup> The calculation of the socio-economic scores is taken from Blishen et al. (1987). In this work based on the 1981 Census, socio-economic scores are computed for each occupation on the basis of three variables: the level of education, the income, and the ratio of women in the occupation. We adopted the scores given by Blishen et al. to the 4-digit occupations in the Canadian Classification and Dictionary of Occupations (CCDO). We transposed the classification into the Standard Occupational Classification 1980 (SOC) and weighted the scores with the labour force by SOC 1980 occupations in the 1991 Census of Population to arrive at socio-economic scores for the 2-digit level of occupations (21 occupations). This gave us the following scores: Managerial, Administrative 56.78; Natural Science 61.78; Social Science 56.30; Religion 50.48; Teaching 61.61; Medicine 55.65; Artistic 43.62; Clerical 37.97; Sales 36.55; Service 29.35; Farming 27.16; Fishing 25.22; Forestry 30.04; Mining 42.08; Processing 34.25; Machining 41.17; Fabricating 37.94; Construction 37.75; Transportation 36.56; Materials Handling 31.25; Other Crafts 43.04; and, Not Stated 29.94. We use a more detailed classification of occupations than previously to produce a richer scale of the occupations, free from the constraints of regression analysis.
  - <sup>6</sup> Unfortunately, the sample size is too small to permit a replication of this table for the two cohorts separately. Therefore we cannot determine if the magnitude of the influence of father's occupation has changed over time. However, the regression results presented in the previous two sections have led us to think that this influence has decreased between the two generations.

Bibliography

BLISHEN, Bernard R., William K. CARROLL and Catherine MOORE (1987). "The 1981 Socio-Economic Index for Occupations in Canada." *Canadian Review of Sociology and Anthropology*. November 1987, Vol. 24, (4), p. 465-488.

CANADIAN LABOUR MARKET AND PRODUCTIVITY CENTRE (1993). *1991 National Training Survey*. Ottawa.

DE BROUCKER, Patrice (1997). "Job-related Education and Training—Who has access?" *Education Quarterly Review*. Vol. 4, No. 1. Ottawa: Statistics Canada, Catalogue No. 81-003.

FOURNIER, Élane, George BUTLIN and Philip GILES (1995). "Intergenerational Change in the Education of Canadians." *Education Quarterly Review*. Vol. 2, No. 2. Ottawa: Statistics Canada, Catalogue No. 81-003.

HIRSHHORN, Ronald (1990). "Thinking Intergenerationally." Economic Council of Canada, Working Paper No. 9.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT and STATISTICS CANADA. (1995). *Literacy, Economy, and Society: Results of the First International Adult Literacy Survey*. Ottawa: Statistics Canada, Catalogue No. 89-545.

STATISTICS CANADA (1996). *Reading the Future: A Portrait of Literacy in Canada*. Ottawa: Statistics Canada Catalogue No. 89-551.





## Chapter 9

# Health Care Utilization During the First Year of Life: The Impact of Social and Economic Background

TAMARA KNIGHTON, CHRISTIAN HOULE, JEAN-MARIE BERTHELOT AND CAM MUSTARD

---

Socio-economic status—as measured by income, education and occupation—is a complex phenomenon used to describe social inequities. It is well known that people in lower socio-economic categories experience higher mortality rates and poorer health than those further up the social ladder. In addition, differences in health by socio-economic status are most pronounced in early and late mid- life.<sup>1</sup> However, it is not clearly understood why this is so. Selection effects, individual adult life experiences, or early childhood experiences may all play a role (House et al. 1990; Hertzman 1993). But one important impediment to understanding these patterns has to do with the fact that socio-economic status may be both the cause and the result of ill health: for example, low-income may lead to a life of poor health, or poor health may predispose people to a life of low-income. Furthermore, many measures of socio-economic status are ecologically based, that is to say they measure the status of the area in which individuals resides, not the individuals' actual socio-economic status.

In the case of infants, however, the causal relationship is more straightforward: socio-economic status influences health, but ill-health is less likely to reduce family income or alter parental education. Yet the literature has been largely focused on the adult population. An understanding of differences in health utilization during infancy by socio-economic status may, therefore, contribute to a better understanding of the health outcomes or behaviours associated with socio-economic environment. It may also provide insight into the relationship between early childhood experiences and health outcomes in later life.

Parental income, education, and occupation have been shown to influence childhood health. In particular, low socio-economic status is related to low birth weight, higher mortality, and higher incidence of various morbidities and behavioural

problems.<sup>2</sup> The focus of the literature has typically been on the influence of socio-economic status on various diseases rather than on overall health use. In part this is due to the fact that differences in the use of health services across socio-economic groups may reflect differences in health status, but also differences in behaviour with respect to the health delivery system.

For example, some studies have shown that higher use of preventive care is related to higher socio-economic status (Newacheck et al. 1995; Pill, Peters and Robling 1995; Newacheck and Halfon 1988). Clinical practice standards in infant health emphasize not just the treatment of symptoms and illness during early childhood, but also “well” baby care (meaning the immunization and monitoring of infant development for the onset of congenital and developmental deficits). It has been established that appropriate preventive health care during infancy improves the short and long-term health of the child (Redman et al. 1992). The implication is that inadequate preventive care during infancy could set in motion processes detrimental to health, processes that cannot be reversed even if the initial cause is subsequently addressed (Williams 1990). In this sense the relationship between higher socio-economic status and health is not direct, but related to how the health care system is used and delivered.

To the best of our knowledge there have been no Canadian studies providing a comprehensive overview of socio-economic disparities in health care utilization during infancy, encompassing both hospital and ambulatory care as well as preventive and treatment-oriented care. In this chapter we describe an analysis that is intended to fill this void. Our work is based upon a unique data set that provides an opportunity to examine the effects of parental socio-economic status on infant health use during the first year of life. We are able to link socio-economic information on individuals from the 1986 Canadian Census

with comprehensive hospital and medical care utilization data for the province of Manitoba. Our analysis has two objectives: [1] to examine socio-economic differences in health care utilization during the first year of life; and [2] to examine socio-economic differences in the use of preventive and curative health care.

We find that parental socio-economic status has an impact on infant use of health services during the first year of life, but parental education seems to exert a stronger influence than income. Infants born to parents whose education levels place them in the bottom 25% of the population tend to be more likely to use treatment care services and less likely to use preventive care services, than infants whose parents had more education. This education effect underlines the importance of behavioural factors—in addition to material resources—in explaining health inequalities during the first year of life.

## 1. Methods

The data base associated with the "Linked Census—Manitoba Health Services Insurance Plan Project" is the source of our information. This data base was created through a collaborative effort between the Government of Manitoba, the University of Manitoba, and Statistics Canada to assess the analytical benefits of linking administrative health care records with the 1986 Census data. As a part of this project individual socio-economic status information (household income, and educational attainment) from the Canadian Census conducted in June of 1986 is linked with data from the Manitoba Health Services Insurance Plan longitudinal files. The linked data consists of hospital discharge records and physician services claims covering the seven fiscal years between 1983 and 1989, and 1986 information for those completing the more detailed Census questionnaire (the 2B Form). The information on hospital separation records includes: type of visit; primary and subsequent diagnoses codes; clinical procedure codes; and date of admission and separation. Additionally, newborn separation records contain information on birth weight and gestation period, while physician services claims contain information relating to a billable physician service such as diagnostic code, tariff code, net fee charged for service, and date for service. All health records contain a unique personal identification number that permit the linkage of hospital records and medical encounters to produce comprehensive individual histories of health care utilization.

The linked data are based on a stratified random sample of 47,935 individuals in 16,627 private or collective dwellings representing the Manitoba population as of Census day June 3, 1986. Details of the sampling methodology, linkage, and quality evaluation are provided in Houle et al. (1996) and David et al. (1993). Our analysis is based on a study sample of infants born between June 4, 1986 and March 31, 1989 to women in the sample living in private household dwellings. However, infants who migrated out of the province during their first year of life are excluded, and birth event results are reported only for infants who are born in and discharged from the hospital. The sample is made up of 1,882 infants. A Manitoba administrative file identifying babies born to women in the sample was used to obtain these individuals. Each infant had a unique personal health information number that was used to obtain health services data. Health services records are obtained for a one year period from the date of birth, representing 2,660 hospital discharge records and 27,200 ambulatory (non-hospital) physician services claims.

Two measures of socio-economic status derived from 1986 Census data are used: household income and maternal education. **Household income** refers to the total income received by all persons 15 years of age and over in the household during the calendar year 1985 from wages and salaries, self-employment income (non-farm and farm), government transfer payments, investment income, and other income. The value was adjusted for household size. **Maternal education** is based on the number of years of schooling and was derived using the highest grade (1 to 13) of secondary school completed, the number of years at university or other post secondary institutions, and the degrees, certificates or diploma obtained. Years of schooling ranged from zero (representing no schooling) to 19 (representing a PhD).

Three additional risk factors are included in the analysis: short gestation period, low birth weight, and maternal age. Gestation period and birth weight are provided on the hospital birth record; short gestation period is defined as a gestation period of less than 37 weeks; and low birth weight is defined as a birth weight less than 2,500 grams. Maternal age is obtained from the census file and is treated as a continuous variable in the analysis.

We examine three types of health utilization: hospital admissions, ambulatory treatment care visits, and ambulatory preventive care visits.



**Hospital admissions** include admissions of at least one day in length, and are all considered to be treatment oriented. Hospital transfers are associated with the initial hospital admission and treated as one visit, and visits of 60 days or more are capped at 60 days. **Ambulatory treatment care visits** pertain to care received for the management of an acute or chronic disease or condition. High frequency treatment care is identified using the top 25% of visits based on a weighted frequency distribution. This amounts to 10 or more visits during the year. Finally, **ambulatory preventive care visits** is defined as any type of care received whose primary purpose is to prevent disease or promote health. The following—based upon information provided by physicians—are considered as preventive contacts: health supervision of an infant or child; general medical examination; and immunization and vaccination. High frequency preventive care is based on the top 25% of visits. Using a weighted frequency distribution this turns out to be five or more visits during the year. (The analysis uses weighted data from a complex design sample to represent infants born in Manitoba on Census day in 1986.)

Hospital costs are derived by multiplying per diem hospital charges by the length of stay. Hospital per diem charges (fiscal year 1991-92) are obtained from the Population Health Information System at the Manitoba Centre for Health Policy and Evaluation. Ambulatory care costs are constructed using the associated fee provided by Manitoba Health Services Insurance Plan for the service rendered by the physician. Laboratory tests and imaging tests are included in the calculation of ambulatory care costs. All costs are measured in 1986 dollars defined using the health care component of the Consumer Price Index.

## 2. Results

We present results for four types of utilization: [1] hospital contacts resulting from the birth event; [2] hospital contacts during the first year of life excluding the birth event; [3] treatment oriented ambulatory medical care contacts; and [4] preventive oriented ambulatory medical care contacts.

### The Birth Event

A significant negative relationship exists between both income and education, and short gestation period. For example, infants with short gestation

are twice as likely to be born to parents in the lowest education quartile than in the highest education quartile (see Table 9.1). A similar relationship exists with respect to low birth weight: higher education or higher income are associated with lower chances of low weight births.

The average length of hospital stay for the birth event was slightly higher for those in the lower income and education quartiles, but the difference in the means between the highest and lowest quartile does not appear, according to a t-test, to be statistically significant.

Overall 41.6% of newborn births had diagnoses associated with the fetal period or the birth event. Perinatal morbidity accounts for the majority of the reported diagnoses (87.6%) followed by congenital anomalies (10.7%).<sup>3</sup> There are no significant differences across education and income categories in the percentage of infants with any morbidity. (Roughly 40% of births in all income and education quartiles experience any morbidity.)

### Hospital Use During the First Year of Life

The use of hospital resources is a function of the admission rate, and the average length of stay. Both of these factors are negatively associated with socio-economic status. Socio-economic status differences in hospital admission rates are most pronounced in the lowest quartile relative to the other quartiles (Table 9.2, Panel A).<sup>4</sup> Hospital admission rates are approximately twice as high for those in the lowest income or education quartile compared to those in the highest quartile. Infants in the lowest socio-economic status quartile are also more likely to have a higher frequency of hospital visits. This difference is most pronounced for education, with the rate of infants experiencing two or more hospital visits in the lowest quartile being twice the rate of those in the second lowest quartile and four times the rate in the highest two quartiles.

In addition, infants in the lowest socio-economic status groupings spent more days in the hospital during their first year of life. Of infants who visited a hospital, those in the lowest income quartile spent on average 8.5 days in the hospital versus 4.5 days for those in the highest income quartile. Similarly, those in the lowest education quartile spent an average of 9.4 days in the hospital compared to 5.8 days for those in the highest education quartile.<sup>5</sup>

We also conduct a multivariate analysis that simultaneously controls for the impact of income,

Table 9.1  
Household Income, Maternal Education and the Birth Event

	Short Gestation Period (less than 37 weeks)	Low Birth Weight (less than 2,500 grams)	Average Hospital Stay
	(per 1,000 Births)		(Days)
A. Household Income Quartile			
Lowest	69	59	4.9
Second	66	52	4.8
Third	43	26	4.4
Top	42	21	4.5
B. Maternal Education Quartile			
Lowest	78	63	4.6
Second	60	49	5.1
Third	47	29	4.6
Top	36	38	4.4

Table 9.2  
Hospital Admissions, and Ambulatory Care During the First Year  
of Life by Socio-Economic Status

	Bottom Quartile	Second Quartile	Third Quartile	Top Quartile
(per 100 Infants)				
A. Hospital Admissions				
Income				
At least One Visit	19.8*	15.4*	13.7*	11.2*
Two or More Visits	5.3*	5.4*	4.1*	0.9*
Education				
At least One Visit	24.9*	12.8*	11.2*	11.5*
Two or More Visits	8.0*	3.7*	2.0*	2.2*
B. Ambulatory Treatment Utilization				
Income				
At least One Contact	96.0	95.8	95.8	93.9
High Frequency Contact¹	29.1	27.9	23.1	21.6
Education				
At least One Contact	93.2	96.8	96.1	95.7
High Frequency Contact¹	28.4*	26.4*	26.2*	21.2*
C. Ambulatory Preventive Care Utilization				
Income				
At least One Contact	89.2*	93.2*	94.2*	96.9*
High Frequency Contact²	21.6	27.4	25.4	32.1
Education				
At least One Contact	86.7*	94.5*	97.2*	94.8*
High Frequency Contact²	18.9*	27.9*	28.1*	30.9*

<sup>1</sup> Ten or more visits

<sup>2</sup> Five or more visits

\* Indicates that row elements are significantly different from each other at 0.10 level of significance.

Shaded indicates that row elements are significantly different from each other at 0.05 level of significance.

**Bold** indicates that row elements are significantly different from each other at 0.01 level of significance.

**Bold\*** indicates that row elements are significantly different from each other at 0.001 level of significance.

Table 9.3

**Hospital Admissions and Ambulatory Care by Socio-Economic Status: Logistic Regression Estimates of the Odds Ratios**

	Hospital Admissions		High Frequency Ambulatory Treatment Care		High Frequency Ambulatory Preventive Care	
	Odds Ratio	Marginal Significance Level	Odds Ratio	Marginal Significance Level	Odds Ratio	Marginal Significance Level
<b>A. Undadjusted Model</b>						
Bottom Income Quartile	1.99	0.0002	1.50	0.007	0.59	0.003
Second Income Quartile	1.45	0.06	1.40	0.03	0.82	0.15
Third Income Quartile	1.26	0.25	1.09	0.58	0.73	0.02
Bottom Education Quartile	2.59	0.0001	1.48	0.009	0.54	0.0001
Second Education Quartile	1.13	0.54	1.33	0.06	0.88	0.38
Third Education Quartile	0.96	0.85	1.32	0.07	0.89	0.41
<b>B. Adjusted Model</b>						
Bottom Income Quartile	1.34	0.15	1.36	0.05	0.69	0.02
Second Income Quartile	1.12	0.58	1.29	0.11	0.89	0.42
Third Income Quartile	1.12	0.58	1.06	0.71	0.76	0.06
Bottom Education Quartile	1.95	0.0006	1.27	0.16	0.59	0.001
Second Education Quartile	0.98	0.92	1.23	0.19	0.93	0.63
Third Education Quartile	0.87	0.52	1.28	0.12	0.91	0.53
Low Birth Weight	2.95	0.0001	2.45	0.0001	0.87	0.59
Maternal Age	0.96	0.007	0.99	0.71	1.00	0.98

**Note:** Unadjusted Model refers to separate models in which only income, or only education are used. Adjusted Model refers to a model in which income and education appear simultaneously, as well as low birth weight and maternal age.

education, low birth weight, and maternal age on the probability of one or more hospital admissions during the first year of life. This involves the use of logistic regression. Two alternative models are estimated: in the first, income and education are examined independently of other factors (labelled the Unadjusted Model in Table 9.3); in the second, these other factors are simultaneously controlled for (the Adjusted Model in Table 9.3).<sup>6</sup> When examined independently, income and education are positively associated with the probability of having one or more hospital visits during the first year of life, but the impact of education is more notable. Children in the lowest household income and maternal education quartiles have the highest probabilities of hospital admission. For example, those born to parents in the bottom income quartile are 1.99 times as likely to experience one or more admissions than those born to parents in the top 25%, and those born to a mother in the bottom education quartile are 2.59 times more likely to do so

than their counterparts in the top quartile. However, when low birth weight, maternal age and the other socio-economic status measure are controlled, education—but not income—remains significantly associated with the risk of one or more hospital admissions, as illustrated in the first and second columns of Table 9.3.

**Ambulatory Care Visits**

Almost all infants experience a treatment care visit during their first year of life, and there is no significant relationship with socio-economic status (Table 9.2, Panel B). However, a negative relationship does exist between socio-economic status and high frequency of contact. In the case of income, there appears to be a threshold effect between the bottom two quartiles and the top two quartiles. With respect to education, a lower rate is evident in the highest quartile, but similar rates in the remaining quartiles.



Table 9.4  
**Average Health Care Utilization Costs per Person-Year  
 by Type of Care and Socio-Economic Status  
 (1986 Dollars)**

	Hospital Care		Ambulatory Care		Total Costs
	Hospital Costs	Medical Costs	Treatment	Preventive	
(Costs per Person, 1986 Dollars)					
Household Income Quartile					
Lowest	851	77	267	69	1,264
Second	810	79	258	76	1,223
Third	361	55	222	80	718
Top	231	45	201	87	564
Maternal Education Quartile					
Lowest	1,152	69	254	65	1,540
Second	398	72	244	81	795
Third	391	62	242	84	779
Top	327	55	212	82	676

When considered independently both income and education are significantly related to high frequency ambulatory treatment care. Infants at higher risk of treatment care are those in the lowest two income quartiles and those in the lowest education quartile relative to their counterparts in the highest quartile. However, when all variables are included in a regression model education no longer remains significantly related to high treatment care (Table 9.3).

There is a positive association between ambulatory preventive care contact and socio-economic status. As income increases so does the percentage of infants who have at least one preventive care visit during the first year of life (Table 9.2). In addition, those in the higher income and education groupings have higher rates of high frequency (five or more visits) preventive care. Income and education remain positively associated with ambulatory preventive care when low birth weight and maternal age are controlled for (Table 9.3). Infants in the lowest income quartile had 69% the chances of high frequency preventive contact relative to those in the highest quartile. The difference was larger across education categories with those in the lowest quartile having only 59% the chances of high

frequency preventive contact relative to those in the highest quartile.

### Health Care Costs

Average health care utilization cost per person-year by socio-economic status and type of care are depicted in Table 9.4. Income levels and the amount of dollars of health care consumed move together, but in opposite ways. The amount of money spent per person-year decreases as household income increases, with more than twice as much money being spent on infants in the lowest income quartile relative to those in the highest quartile. With respect to education, a threshold effect seems to be apparent: those in the lowest education quartile consume more dollars per person-year compared to the other quartiles. The cost difference across quartiles is mainly attributable to differences in hospital costs. With respect to type of care, a negative relationship exists between treatment care costs (both hospital and ambulatory) and income and education. As income and education increase less dollars are spent per person. In contrast, a positive association exists between preventive care costs and socio-economic status, with costs per person-year increasing with higher income and education.

### 3. Conclusion

In this chapter we add to the literature on the relationship between socio-economic status and health by providing an analysis of the relationship between hospital and ambulatory medical care utilization during the first year of life and individual based measures of income and education. When income and education are examined independently we find that: [1] infants whose parents have a low level of education face a higher risk of hospitalization, and a higher risk of frequent treatment care while using preventive care less frequently; [2] education has a stronger influence than income on the risk of hospitalization and preventive care use. When income, education, maternal age, and low birth weight are simultaneously controlled for, the role played by income in determining hospitalization risk diminishes, while the role played by education in determining the risk of high frequency treatment care diminishes. Our analysis suggests that these measures are capturing different dimensions of the socio-economic environment. It is likely that income and education reflect different ways in which social factors may influence health and health behaviour.

Various explanations for the relationship between socio-economic status and health have been put forth (Adler et al. 1994; Marmot et al. 1987). One possibility is a so-called "selection hypothesis" in which the direction of causality runs from health status to socio-economic position (Mackenbach et al. 1994). This hypothesis is not supported by our research since we examine the health of infants and obtain socio-economic information before their birth. Consequently the observed relationships between income and education on the one hand, and health care utilization on the other hand can be considered causal with the direction of causality running from socio-economic status to health care, and not in the opposite direction.

Another explanation has to do with the possibility that socio-economic status influences biological functions that in turn influence health status. According to Adler et al. (1994) little is known about how this hypothesis operates since components of socio-economic status—income, education, and occupation—are enmeshed in key aspects of life. For example, they describe four life domains: [1] one's physical environment and associated exposures to pathogens, carcinogens, and other environmental hazards; [2] the social environment including the degree of access to social resources and support; [3]

socialization and experiences; and [4] health behaviour. Within these domains many specific variables may contribute to the relationship between socio-economic status and health.

The use of both income and education in our work is helpful to an understanding of the relationship between health care use during the first year of life and socio-economic status. Several researchers have grouped the underlying risk factors associated with health differences into two categories: material risk factors and behavioural risk factors. Material risk factors include the financial resources needed to purchase goods and services necessary (adequate housing and living conditions) to achieve and maintain good health (Mackenbach et al. 1994; Feinstein 1993). Behavioural risk factors reflect one's social environment. They are defined by Feinstein (1993: p. 307) as individual characteristics that do not necessarily require a greater expenditure of financial resources or that cannot be purchased directly with money, yet which are important in achieving a healthy state. There is no consensus on the relative importance of behavioural versus material explanations of health inequalities. However, if one considers that income represents a proxy for material risk factors while education represents a proxy for behavioural risk factors, behavioural risk factors appear to have a predominant influence in our data.

Knowledge about the way in which income and education exert their influence would facilitate the development of appropriate interventions for specific sub-populations (Gazmararian et al. 1996). Education may operate through individual behavioural patterns associated with both adverse outcomes and education. For example, our analysis is unable to control for maternal smoking, a factor known to increase the risk of low birth weight and respiratory ailments during infancy (Bell and Lumley 1992; Redman et al. 1992; Lumley et al. 1985; Morrison et al. 1989).

The influence of education could also operate through health-enhancing behaviour. Others have also found a relationship between education and preventive care. Redman et al. (1992) examine the relationship between six infant-associated preventive health practices and familial demographic variables, and find that women who did not undertake preventive health practices are more likely to be less educated. Since we observe a threshold effect, a profile of behavioural factors—both health-damaging and health-enhancing—between infants in the lowest education quartile and infants in the other

quartiles may provide additional insight into the underlying mechanisms of education's effect.

Other studies that focus on the relationship between income and health utilization have obtained results similar to ours: poor children tend to use preventive care services less often and have higher rates of hospitalization and emergency care use (Navarro-Rubio et al. 1995; Williams et al. 1995; Egbuono and Starfield 1982; Kleinman et al. 1981). Most studies are conducted in the context of a private medical care system, but at least one other study in addition to ours examines socio-economic status and preventive health care use under a national health care system. Using survey data for Spain, Navarro-Rubio et al. (1995) find a positive relationship between preventive health care use by children and the socio-economic status of their families. The authors find a strong relationship linking both education and income to preventive care. That is, although socio-economic effects are most pronounced at the lowest levels, they persist at all levels. We observe such a relationship only for income. The presence of an income gradient suggests that insurance coverage is not the sole determinant of health status differentials among infants.

Caution is needed when quartiles for income and education are used. It can, for example, be argued that the use of quartiles results in a loss of information. Our finding that differences only exist for infants in the lowest education quartile suggests the possibility that within this quartile there are subsets of infants with extremely high risks for low preventive care services and high treatment care use. A more detailed breakdown would probably provide even greater insight into the observed relationship, but our sample size is limiting in this respect.

Childhood experiences are believed to influence outcomes in later life, but there are no agreed upon mechanisms. Two explanatory models described by Hertzman (1993) suggest that childhood experiences could: [1] operate within a critical period (early in life) during which one is susceptible to discrete events that will have a strong independent effect in later life; [2] operate via a pathways model in which the cumulative effect of life events and ongoing life conditions affect one's health. If one believes in the pathways model, the results from this chapter suggest that socio-economic differences in health care utilization are events that could cumulate.

Finally, our findings dealing with health care costs imply higher health care utilization costs for those in the lowest two income quartiles, and the lowest education quartile. Higher spending among lower socio-economic groups is mainly attributable to hospital costs. Our hospital costing methodology uses standard per-diem costs rather than case-costing. This methodology may overestimate hospital costs for infants with longer lengths of stay, a pattern that occurs more often in the lower quartiles. In addition we examine the reason for hospital stays, and these may be associated with relatively higher or lower costs. However we use hospital specific, rather than a global, per diem cost. Our findings indicate that the relative costs by quartile translate into significant differences in costs expenditure. On the other hand, the high use of preventive services in the higher quartiles implies negligible differences in expenditures. If one considers that preventive care mitigates the need for treatment care, equalization of preventive care may be a cost effective medical approach.

There is a possibility of taking this analysis further. For example, a larger sample size would permit a finer breakdown among those in the lowest socio-economic quartile. This group may contain individuals with extremely high risks for high treatment care use and low preventive service use. More detailed analysis could also focus on the distribution of behavioural and material risk factors among the quartiles in order to test the hypothesis that differences in health use during the first year of life are attributable to differential distributions in risk factors across socio-economic groups.

## Notes

The authors wish to thank Shelley Derksen, Geoff Dougherty, Michael Wolfson, and two anonymous referees for their comments on an earlier draft. However, the final responsibility for the analysis rests solely with the authors, and in particular should not be attributed to Statistics Canada or the Manitoba Centre for Health Policy and Evaluation.

<sup>1</sup> For example, see Adler et al. (1994), Mackenbach (1992), House et al. (1990), Marmot et al. (1987) as well as Mustard et al. (1995).

<sup>2</sup> On the relationship with birth weight see Katz et al. 1994, Mustard and Roos 1994, Starfield



1992; with respect to mortality see Lumey and Reijneveld 1995, Singh and Yu 1995, Nordstrom et al. 1993, Nelson, 1992, and Neresian 1988; morbidities are studied by Roberts et al. 1996, Durkin et al. 1994, Victora et al. 1994, Hertzog, 1992, Margolis et al. 1992, and Starfield, 1992; finally Gortmaker et al. 1990 offer evidence relating to behavioural problems.

<sup>3</sup> More details are available from the authors upon request.

<sup>4</sup> It should be noted that our analysis of hospital admissions includes nursing station admissions, which account for approximately 5% of all hospital admissions. Nursing stations are located in remote northern communities and may not provide treatment to children in the same way as a hospital. However, we did perform the analysis excluding nursing stations, and the results did not change.

<sup>5</sup> These differences are statistically significant. More details are available from the authors.

<sup>6</sup> We also conducted the analysis using continuous measures of income and education rather than the discrete levels reported in Table 9.3. The results are the same, and are available upon request.

## Bibliography

ADLER N.E., W.T. BOYCE, M.A. CHESNEY, S. COHEN, S. FOLMAN, R.L. KAHN and L. SYME (1994). "Socioeconomic Status and Health: The Challenge of the Gradient." *American Psychologist*. Vol. 49, 15-24.

ADLER N.E., W.T. BOYCE, M.A. CHESNEY, S. FOLMAN and L. SYME (1993). "Socioeconomic Inequalities in Health: No Easy Solution." *Journal of the American Medical Association*. Vol. 269, 3140-45.

BELL R. and J. LUMLEY (1992). "Low Birthweight and Socioeconomic Status: Victoria, 1982-1996." *Australian Journal of Public Health*. Vol. 16, 15-19.

BLANE D. (1995). "Social Determinants of Health-Socioeconomic Status, Social Class, and Ethnicity." *American Journal of Public Health*. Vol. 85, 903-904.

DAVID P., J.M. BERTHELOT and C. MUSTARD (1993). "Linking Survey and Administrative Data to Study Determinants of Health." Statistics Canada, Analytical Studies Branch Research Paper Series No.58.

DURKIN M.S., L.L. DAVIDSON, L. KUHN, L. P. O'CONNER and B. BARLOW (1994). "Low Income Neighborhoods and the Risk of Severe Pediatric Injury." *American Journal of Public Health*. Vol. 84, 587-592.

EGBUONO L. and B. STARFIELD (1982). "Child Health and Social Status." *Pediatrics*. Vol. 69, 550.

FEINSTEIN J.S. (1993). "The Relationship between Socioeconomic Status and Health: A Review of the Literature." *The Milbank Quarterly*. Vol. 71, 279-321.

GAZMARARIAN J.A., M.M. ADAMS and E. R. PAMUK (1996). "Associations between Measures of Socioeconomic Status and Maternal Health Behavior." *American Journal of Preventive Medicine*. Vol. 12, 108-115.

GORTMAKER S.L., D.K. WALKER, M. WEITZMAN and A.M. SOBAL (1990). "Chronic Conditions, Socioeconomic Risk, and Behavioral Problems in Children and Adolescents." *Pediatrics*. Vol. 85, 267-276.

HERTZMAN C. (1993). "The Lifetime Impact of Childhood Experiences: A Population Health Perspective." *11<sup>th</sup> Honda Foundation Discoveries Symposium: Prosperity, Health and Well-Being*. Toronto: Canadian Institute for Advanced Research.

HERTZIG M.E. (1992). "Mental Health Problems and Developmental Problems of Children in Poverty." *Bulletin of the New York Academy of Medicine*. Vol. 68, 25-30.

HOULE C., J.M. BERTHELOT, P. DAVID, C. MUSTARD, L. ROOS and M.C. WOLFSON (1996). "Project on Matching Census 1986 Database and Manitoba Health Care Files: Private Household Component." Statistics Canada, Analytical Studies Branch Research Paper Series No. 91.

HOUSE J.S., R.C. KESSLER and A.R. HERZOG (1990). "Age, Socioeconomic Status, and Health." *Milbank Quarterly*. Vol. 68, 383-411.

KATZ S., R.W. ARMSTRONG and P. LOGERFO (1994). "The Adequacy of Prenatal Care and Incidence of Low Birth Weight among the Poor in Washington State and British Columbia." *American Journal of Public Health*. Vol. 84, 986-91.

- KLEINMAN J.C., M. GOLD and D. MAKUC (1981). "Use of Health Care Services by the Poor: Another Look at Equity." *Medical Care*. Vol. 29, 1011.
- LUMLEY J., J.F. CORREY, N.M. NEWMAN and J.T. CURRANT (1985). "Low Birth Weight in Tasmania 1975-1983: The Effects of Socioeconomic Status." *Australian Pediatric Journal*. Vol. 21, 13-14.
- LUMLEY J., J.F. CORREY, N.M. NEWMAN and J.T. CURRANT (1985). "Cigarette Smoking, Alcohol Consumption and Fetal Outcomes in Tasmania 1981-1982." *Australian and New Zealand Journal of Obstetrics and Gynecology*. Vol. 25, 33-40.
- LUMEY L.H. and S.A. REIJNEVELD (1995). "Perinatal Mortality in a First Generation Immigrant Population and its Relationship to Unemployment in the Netherlands." *Journal of Epidemiology and Community Health*. Vol. 49, 454-59.
- MACKENBACH J.P., H. Van de MHEEN and K. STRONKS (1994). "A Prospective Cohort Study Investigating the Explanation of Socio-economic Inequalities in Health in the Netherlands." *Social Science and Medicine*. Vol. 38, 299-308.
- MACKENBACH J.P. (1992). "Socio-economic Health Differences in the Netherlands: A Review of Recent Empirical Findings." *Social Sciences and Medicine*. Vol. 34, 213-26.
- MARGOLIS P.A., R.A. GREENBERG, L.L. KEYS, L.M. LAVANGE, R.S. CHAPMAN, F.W. DENNY, K.E. BAUMAN and B.W. BOAT (1992). "Lower Respiratory Illness in Infants and Low Socioeconomic Status." *American Journal of Public Health*. Vol. 82, 1119-26.
- MARMOT M.G., M. KOGEVINAS and M.A. ELSTON (1987). "Social/Economic Status and Disease." *Annual Review of Public Health*. Vol. 8, 111-35.
- MORRISON J., J.M. NAJMAN, and G.M. WILLIAMS (1989). "Socioeconomic Status and Pregnancy Outcomes: An Australian Study." *British Journal of Obstetrics and Gynecology*. Vol. 96, 298-307.
- MUSTARD C.A., S. DERKSEN, J.M. BERTHELOT, M.C. WOLFSON, L.L. ROOS and K.C. CARRIERE (1995). *Socioeconomic Gradients in Mortality and the Use of Health Care Services at Different Stages in the Life Course*. Winnipeg, Manitoba: Manitoba Centre for Health Policy and Evaluation.
- MUSTARD C.A. and N. ROOS (1994). "The Relationship of Prenatal Care and Pregnancy Complications to Birth Weight in Winnipeg, Canada." *American Journal of Public Health*. Vol. 84, 1450-57.
- NAVARRO-RUBIO M., A.J. JOVEL and E.L. SCHOR (1995). "Socioeconomic Status and Preventive-Health Care Use by Children in Spain." *American Journal of Preventive Medicine*. Vol. 11, 256-62.
- NELSON M.D. (1992). "Socioeconomic Status and Childhood Mortality in North Carolina." *American Journal of Public Health*. Vol. 82, 1131-33.
- NERESIAN, W.S. (1988). "Infant Mortality in Socially Vulnerable Populations." *Annual Review of Public Health*. Vol. 9, 361-67.
- NEWACHECK, P.W., D.C. HUGHES and J.J. STODDARD (1995). "Children's Access to Primary Care: Differences by Race, Income, and Insurance Status." *Pediatrics*. Vol. 97, 27-32.
- NEWACHECK P.W. and HALFTON N. (1988). "Preventive Care Use by School Aged Children: Differences by Socioeconomic Status." *Pediatrics*. 76:1000-1003.
- NEWACHECK P.W. and B. STARFIELD (1988). "Morbidity and Use of Ambulatory Services Among Poor and Non-poor Children." *American Journal of Public Health*. Vol. 78, 927-933.
- NORDSTROM M.J., S. CNATTINGIUS and B. HAGLUND (1993). "Social Differences in Swedish Infant Mortality by Cause of Death, 1983-1986." *American Journal of Public Health*. Vol. 83, 26-30.
- PAPPAS G, S. QUEEN, W. HADDEN and G. FISHER (1993). "The Increasing Disparity in Mortality between Socio-Economic Groups in the United States, 1960 and 1986." *New England Journal of Medicine*. Vol. 329, 103-09.
- PILL R., T.J. PETERS and M.R. ROBLING (1995). "Social Class and Preventive Health Behaviour: A British Example." *Journal of Epidemiology and Community Health*. Vol. 49, 28-32.
- REDMAN S., P. BOOTH, H. SMYTH and C. PAUL (1992). "Preventive Health Behaviours among Parents of Infants Aged Four Months." *Australian Journal of Public Health*. Vol. 16, 175-81.

- ROBERTS I., R. NORTON and B. TAUA (1996). "Child Pedestrian Injury Rates: The Importance of 'Exposure to Risk' Relating to Socioeconomic and Ethnic Differences in Auckland, New Zealand." *Journal of Epidemiology and Community Health*. Vol. 50, 162-65.
- SINGH G.K. and S.M. YU (1995). "Infant Mortality in the United States: Trends, Differentials, and Projections, 1950 through 2010." *American Journal of Public Health*. Vol. 85, 957-64.
- SCHWARTZ J.E., H.S. FRIEDMAN, J.S. TUCKER, C. TOMLINSON-KEASEY, D.L. WINGARD and M.H. CRIQUI (1995). "Sociodemographic and Psychosocial Factors in Childhood as Predictors of Adult Mortality." *American Journal of Public Health*. Vol. 85, 1237-45.
- STARFIELD, B. (1992). "Effects of Poverty on Health Status." *Bulletin of the New York Academy of Medicine*. Vol. 68, 17-27.
- STARFIELD B., S. SHAPIRO and J. WEISS (1991). "Race, Family Income and Low Birth Weight." *American Journal of Epidemiology*. Vol. 34, 1167-74.
- STARFIELD B. (1989). "Child Health Care and Social Factors: Poverty, Class, Race." *Bulletin of the New York Academy of Medicine*. Vol. 65, 299-306.
- VICTORA C.G., S.C. FUCHS, J.A.C. FLORES, W. FONSECA and B. KIRKWOOD (1994). "Risk Factors among Children in a Brazilian Metropolitan Area." *Pediatrics*. Vol. 93, 977-85.
- WILLIAMS I.T, J.D. MILTON, J.B. FARELL and N.M.H. GRAHAM (1995). "Interaction of Socioeconomic Status and Provider Practice as Predictors of Immunization Coverage in Virginia Children." *Pediatrics*. Vol. 96; 439-45.
- WILLIAMS D.R. (1990). "Socio-Economic Differentials in Health: A Review and Redirection." *Social Psychology Quarterly*. 53(2): 81-99.





## Chapter 10

# Eternal Youth? Changes in the Living Arrangements of Young People

DOMINIQUE MEUNIER, PAUL BERNARD AND JOHANNE BOISJOLY

---

To some important degree young people establish their living arrangements in response to the constraints and opportunities created for them by previous generations. In fact, the very definition of what it means to be a youth is at the core of this intergenerational relationship since it determines the appropriate way for people to live when they are of a particular age. The nature of the family, the structure of the school system, and the opportunities for work are the central institutions determining the transition to adulthood, and the associated "living arrangements." For example, to Galland (1985, 1993), youth is a process of social establishment, through which people move from the dependency of childhood to various forms of autonomy in adulthood: it involves moving away from the family of origin and forming a couple, after having concluded the preparatory stage of schooling and acquired a relatively independent means of subsistence. In Canada, this is no longer an orderly sequence of events. The stages last longer, and they collide with one another: previously incompatible statuses now coincide, previously irreversible changes are now reversible. Our objective in this chapter is to document these changes.

Many North American researchers have focused on one key aspect of the transition from youth to adulthood, the changing propensity of unmarried young adults to leave home (Boyd and Pryor 1989, Boyd and Norris 1994). Goldscheider and Goldscheider (1994), however, decompose this single event into three broad avenues: family formation (marriage, or the formation of a non-traditional family via cohabitation and single parenthood), semi-independence (either to attend school, or to enter military service), and non-marital independence (either to take a job, or simply to live independently). This approach is closer to Galland, and we adopt it in this chapter to study changes in the living arrangements of young men and women.

We define "living arrangements" along three major dimensions. First, **relations of cohabitation**, reflecting with whom young people share their daily lives. This sharing may involve living with parents, living as an independent couple, living alone or in a household with non-relatives, in a single parent household, or in a non-conventional familial household. Second, **relations to schooling**, which may require more or less of young people's available time: full or part-time schooling, or non-involvement in it. And finally, **relations to paid work**, with various levels and forms of involvement: out of the labour force, unemployed for a short or a long period, employed part-time or full-time. We offer a descriptive overview of the changes taking place in the living arrangements among various cohorts of young Canadians during the 1980s, focusing on three broad patterns: [1] deferral, where access to autonomous living arrangements is gained later in life; [2] destandardization, where various hybrid transition states become more prevalent; and [3] the attenuation of differences between men and women.

The next section of the chapter discusses these patterns in more detail, and is followed in Section 2 by an overview of our data and methodology. The major results are presented in Section 3. In particular, we find that the 1980s were a period of rapid change in the living arrangements of young Canadians. A significant proportion have deferred forming couples and have continued to live with their parents for a longer period. To cite one example, in 1981 about 26% of 23 to 24 year olds lived with their parents, but in 1990, 40% did so. In addition, the young are now staying in school longer, but still experiencing difficulty getting a foothold in the labour market. Even those who have left school, found a job and living independently are still not "established" workers. Finally, we also find that relative to their male counterparts young women

are in fact more likely to prolong schooling, leave the parental home, find a job, and form a couple earlier.

## 1. A Taxonomy: Deferral, Destandardization, and Attenuation

Taking our inspiration mainly from the work of Galland, we explore three main patterns concerning the evolution of the situation of young people during the 1980s in Canada. The first pattern involves the extent to which there is a trend towards deferral: access to adult roles (finishing school, finding a job, leaving home, forming a union) being gained later in life than was the case in an earlier period. Second, as a consequence of this lengthening of the youth period do unusual living arrangements multiply? This destandardization might imply, for example, combining school and work, or living away from the parents' home without forming a union. Third, to what extent is there an attenuation of gender differences? Specifically, what is the trend in the proportion of women living exclusively in a matrimonial/familial relationship, and the proportion lengthening the time spent in schooling?

The pattern of **deferral** in access to adult roles involves all three dimensions of living arrangements—cohabitation, schooling, and work—so that it translates into a number of sub-patterns. (See Table 10.1.) It is possible that young people now leave the parental home later in life (hypothesis 1.1). Their propensity to form couples, either married or common-law, may also decrease, even among those who have left the parental home (hypothesis 1.2). In addition, schooling, both full-time and part-time, may last longer (hypothesis 1.3). Paradoxically, involvement in the labour market may start earlier in life, not later (hypothesis 1.4). But, in conformity with the notion of deferral, this activity will increasingly involve contingent work rather than an employment trajectory that helps launch young people into adult roles and living arrangements (hypothesis 1.5). This may be the case even among young people who have left school and who do hold a job (hypothesis 1.6), and among those who have also left the parental home (hypothesis 1.7).

The latter two patterns could indeed be a part of the **destandardization** of the usual life stages, and the multiplication of "hybrid" living arrangements. First, all forms of cohabitation other than forming a couple may be relatively

more frequent among those who have left the parental home: living alone or in a household with non-relatives, in a single parent household, or in a non-conventional familial household (hypothesis 2.1). Second, young people may more frequently be both students and workers, and at later ages (hypothesis 2.2). Finally, there may be a greater proportion of young people who are out of school and still living with their parents: some may be out of a job (hypothesis 2.3), while others may have a job but will not feel they can or should leave the parental home (hypothesis 2.4).

Up to this point, we have given destandardization a strictly descriptive meaning, in reference to hybrid living arrangements: leaving the parental home without forming a couple, assuming the ambiguous status of student/worker, staying with parents for lack of a good job, or even if one has been found. In the last three of these four cases, we may also ask ourselves whether such hybrid combinations attract young people in higher numbers than one would expect simply from independent changes in the distributions of the three underlying dimensions: relations of cohabitation, relations to schooling, and relations to work. If so, then such non-standard living arrangements would appear to spring from genuine cultural preferences on the part of young people, rather than simply from the constraints of the situation. In order to test such hypotheses, the observed proportions in these types of living arrangements will be compared to expected proportions. (The Appendix describes how such expected proportions are estimated.)

The **attenuation** of gender differences (hypothesis 3.1) may develop in part from the decrease in the proportion of females who are exclusively involved in a matrimonial/familial relationship (hypothesis 3.2). We might also expect an attenuation of gender differences among younger age groups: the propensity of women leaving the parental home much earlier than males, decreasing both because economic times are more difficult and because they are more involved in prolonged schooling and in paid work (hypothesis 3.3). Among older age groups, the differences between the genders may actually increase along certain dimensions: women may assert their traditionally higher propensity to leave home and to form couples, while men may stay put, not engaging in independent living arrangements they probably consider too demanding from the points of view of norms or resources (hypothesis 3.4). "Older" men who



leave home will disproportionately live alone or with roommates, outside of any family form (hypothesis 3.5), while “older” women will disproportionately become single parents (hypothesis 3.6). Finally, other forms of familial solidarity will take their share of the increased numbers of both men and women who have left home and not (yet) formed a couple (hypothesis 3.7).

## 2. Data and Methods

In order to examine these patterns, we use the Survey of Consumer Finances (SCF) as it has a large enough sample to allow a detailed examination of living arrangements, even within specific gender and age groupings. Just as importantly the SCF contains an impressive amount of factual information about all three dimensions of living arrangements. It has also been conducted annually for a reasonably long time period, so that we can detect changes in how young people's living arrangements have evolved.

We use fairly simple statistical methods, such as percentages and coefficients of dissimilarity, since our objective is to highlight changes through time rather than to offer a causal modelling of the underlying processes. Our major methodological challenges concern the appropriate definition of age groupings, the time period over which comparisons are made, and finally the construction of a typology of living arrangements and its reduction to a manageable set of categories.

We attempt to avoid imposing arbitrary limits on the age at which youth starts and ends, especially since we are interested in patterns of deferral over time. We have followed the widely used practice of selecting ages 15 and 34 as boundaries. Indeed, the data reveal that very few young people have left home or school at 15 or 16 years of age. The transition to independence is barely underway at these ages. However, most have left home and school by the age of 30, even though they may not have gained a secure position in the labour market or formed a stable union. The transition to adulthood seems to have been completed by this age.

Since our interest lies in what happens to young people as they age (particularly in the deferral of certain transitions and in the lengthening of stays in non-standard living arrangements) we examine rather narrowly defined age categories. Balancing this need for

detail against the necessities of parsimony, seven age groups are defined: 15 to 16 years, those who are still teenagers and must attend school; 17 to 18 years, those who are barely out of this situation; 19 to 20 years, those who have largely attained the age of legal majority; 21 to 22, and 23 to 24 years, those who are in the midst of orienting and establishing themselves; 25 to 29 years, those who are approaching stability; and finally the subgroup ranging from 30 to 34 years, representing the standard for autonomous adult status, to which other age groups can be compared. It makes sense that these groupings are narrower at younger ages, where living arrangements change more rapidly, and broader at older ages, where we can expect the situation to gradually stabilize.<sup>1</sup>

It should be pointed out that changes in the distribution of living arrangements between age groups reflects net displacements, not all movements between categories. We cannot take for granted that young people currently deferring some transitions or living in non-standard arrangements have not experienced more autonomy beforehand, or that young people currently experiencing more autonomy will consolidate their situation. However, since the overwhelming majority of young people do move from dependence to independence between the ages of 15 and 34, it seems reasonable to examine how their living arrangements are distributed, in the net, over various parts of this age range, and how this distribution evolves over time.

The analysis is focused on the 1980s, a time of radical change in terms of the economic circumstances faced by young people. The unemployment rate for those 15 to 24 years of age was about the same in 1981 (13.1%) as in 1990 (12.7%). It seems reasonable to select years where this rate is similar since this variable is directly related to the establishment of living arrangements. This being said, it is obvious that economic conditions have changed dramatically during the period, and this is largely reflected in the distribution of living arrangements. The constraints and opportunities for young people have been profoundly modified, and we want to observe how this generation has reacted. First, there was a dramatic decline in the relative earnings of the young over the decade: about 20% for 17 to 24 year-olds, and 10% for 25 to 29 year-olds (Morissette, Myles, and Picot, 1993). Second, Riddell (1995) argues that relative unemployment increased for less educated young people. Third, the relative cost of shelter

Table 10.1  
**A Taxonomy of Living Arrangements**

Hypotheses and sub-hypotheses	Data Patterns (Ratios of Living Arrangement Types)
1. Defferal	
1.1 Later parental home leaving	(1 to 5) / All
1.2 Later formation of couples, even among home leavers	(6 to 10) / (6 to 7)
1.3 Longer schooling	(1,2,6,11) / All
1.4 Earlier involvement in the labour market	(2,3,4,8,9,12,13) / All
1.5 Longer period of contingent work	(4,9,13) / (2 to 5, 7 to 10, 12 to 14)
1.6 Longer period of contingent work even for those finished schooling and having a job	(4,9,13) / (3,4,8,9,12,13)
1.7 Longer period of contingent work even for those finished schooling, and having a job, and having left home	(9,13) / (8,9,12,13)
2. Destandardization	
2.1 Growing propensity to live outside standard family forms	(11 to 14) / All; (15,16) / All; 17 / All
2.2 Growing proportion of student/workers living with their parents	2 / All
2.3 Growing proportion of inactive people or contingent workers living with their parents	(3,5) / All
2.4 Growing proportion of established workers who are living with their parents	4 / All
3. Attenuation of Gender Differences	
3.1 Attenuation, yet persistence of age-specific gender differences	Coefficients of dissimilarity across all types
3.2 Decreasing proportion of inactive women living in couples	10 / All
3.3 Decreasing propensity of "younger" women leaving their homes earlier than men	(1 to 5) / All
3.4 Increasing propensity of "older" women forming couples earlier than men	(6 to 10) / All
3.5 Increasing propensity of "older" men living alone or with roommates	(11 to 14) / All
3.6 Increasing propensity of "older" men/women becoming single parents	(15, 16) / All
3.7 Increasing propensity of men and women using other types of familial solidarity	17 / All

**Note:** See text for definitions of living arrangement types used in Column 2.

has increased over the decade (the shelter cost sub-index advanced 11% faster over the decade than the overall Consumer Price Index). Thus, young people in 1990 had greater financial hurdles to overcome in leaving the parental home, forming spousal unions, and establishing independent households. Furthermore, there was an increasing employment-related incentive for them to stay in school longer.

The construction of our living arrangements typology involves cross-classifying the five categories describing relations of cohabitation, the three categories for relations to schooling, and the seven categories for relations to work. The resulting 105 possible types are then reduced to a more manageable set of 17 types (see the Appendix for details). For the most numerous group, those living with their parents,

we constructed five categories: [1] those whose only activity is schooling; [2] those whose schooling activities predominate over their paid work; [3] contingent workers, for whom work is the major activity, even though they have not acquired a great deal of seniority in a full-time job, and even though some may still be somewhat involved in schooling; [4] established workers who have relatively long tenure in a full-time job; and finally [5] those who are marginalized with respect to the labour market while at the same time not being involved in schooling.

Among couples, we distinguish five types: [6] cases where schooling predominates; [7] non-student unemployed workers; [8] contingent workers (less than one year tenure in a full-time job); [9] established workers; and [10] inactivity without involvement in schooling. For those living alone or with roommates, small numbers force

Table 10.2  
Data Patterns for the Deferral Hypothesis

		Age						
		15 to 16	17 to 18	19 to 20	21 to 22	23 to 24	25 to 29	30 to 34
		Percent						
Living with Parents								
1	1981	98.5	90.6	70.3	47.7	25.8	10.9	4.4
2	1990	99.0	92.4	76.2	55.7	40.2	17.7	6.6
3	Change	0.5	1.8	5.9	8.0	14.4	6.8	2.2
Living in Couples (among those not living with parents)								
4	1981	-	22.3	45.5	54.7	63.9	76.2	81.6
5	1990	-	17.1	31.1	38.6	53.5	67.0	75.5
6	Change	-	-5.2	-14.4	-16.1	-10.4	-9.3	-6.1
Mainly in School								
7	1981	91.6	63.2	31.6	17.4	8.2	3.4	1.8
8	1990	95.5	76.4	44.5	30.6	16.6	5.0	2.8
9	Change	3.9	13.2	12.9	13.2	8.4	1.6	1.0
Involved in the Labour Market								
10	1981	33.4	51.8	57.5	62.8	64.7	67.4	68.9
11	1990	42.4	55.8	57.6	55.8	64.6	70.1	70.4
12	Change	9.0	4.0	0.1	-7.0	-0.1	2.7	1.5
Established Workers								
13	1981	-	5.7	24.3	38.6	44.8	51.0	55.4
14	1990	-	3.5	15.8	29.2	41.4	52.3	54.8
15	Change	-	-2.1	-8.6	-9.4	-3.4	1.3	-0.6
Established Workers (among those finished schooling and holding a job)								
16	1981	-	19.5	43.7	55.3	62.0	69.2	73.9
17	1990	-	18.4	33.0	48.5	56.9	66.3	70.4
18	Change	-	-1.1	-10.7	-6.7	-5.1	-2.9	-3.5
Established Workers (among those finished schooling, holding a job, and having left home)								
19	1981	-	14.7	48.3	55.0	62.7	69.0	73.6
20	1990	-	13.3	30.4	49.8	58.9	67.0	70.1
21	Change	-	-1.4	-17.9	-5.3	-3.8	-2.1	-3.5

**Note:** - indicates sample variability higher than 25%, in all other cells sample variability is below 16.5%.

**Source:** Calculations by authors using Statistics Canada, Survey of Consumer Finances.

us to be more parsimonious: we group in type [11] cases where schooling predominates; in [12] contingent workers; in [13] established workers; and in [14] people who are on the margins of the labour market and not involved in schooling. The small number of single-parents only offers the opportunity to distinguish between: [15] those who are engaged in work or study or both; and [16] those who are not. Finally, we have had to keep as a single category [17] the few people who live in other family arrangements. While some of these seventeen types bring together young people who live in quite different situations, they nevertheless are indicative of major aspects of their experience. Table 10.1 summarizes our taxonomy, as well as the data patterns that will be examined to test them; these patterns consist, in most cases, of proportions and ratios involving the 17 types.

### 3. Results

The detailed distributions of young people, by age groups, into the 17 living arrangement types for 1981 and 1990 are presented in an appendix available from the authors. For most of the analysis we use simpler tables displaying ratios of types of living arrangements.

Table 10.2 organizes the data required for the examination of the deferral sub-hypotheses. Living with parents is almost universal at age 15 and 16, and becomes very rare beyond 30 (lines 1 and 2); at the same time couples are rarely found at 15 and 16, but they are by far the preferred form of cohabitation beyond 30 (lines 4 and 5). Young people keep on living with their parents in increasing proportions at later ages (hypothesis 1.1), and especially around 23 and 24, where the increase in this form of cohabitation



reaches 14% (line 3). Consequently, it is to be expected that couples are formed less often (hypothesis 1.2), especially from ages 19 through 29. But the two phenomena are not mirror images of one another: even among young people no longer living with their parents, the proportion forming couples also declines (line 6 of Table 10.2). In other words, alternative patterns of cohabitation have proliferated, especially from age 20 onwards.

We regroup the types of living arrangements in order to examine the other patterns of deferral: types 1, 2, 6, and 11 all involve a significant amount of schooling (and adding type 15 changes nothing to the pattern we will report); types 2, 3, 4, 8, 9, 12, 13 all involve a significant amount of paid work (and, again, adding type 15 changes nothing to the pattern). As one would expect, schooling activities go down dramatically through the age range (lines 7 and 8 of Table 10.2), while paid work goes up (lines 10 and 11); it must, however, be noted that about a third of the 15 and 16 year olds were already involved in work in 1981, and only slightly more than two thirds beyond age 30.

The changes have been quite dramatic over the decade. Schooling is up in all age groups, and most dramatically from 17 to 24 years (line 9). Working (line 12) has increased both among the youngest (15 through 18 years) and the oldest (25 and up). Young people between the ages of 19 and 24 have not increased their presence in the labour market, however, and there has even been a dramatic decrease among 21 and 22 year olds. As will become clearer below, these mid-range age groups have clearly reoriented their strategies: in increasing numbers, they go to school instead of looking for work, while a significant proportion use the hybrid formula of combining the two activities.

While involvement in the labour market is more widespread in many age groups, getting a firm foothold is increasingly rare for people younger than 25 years. The proportion of established workers (with at least one year tenure in a full-time job) increases with age (lines 13 and 14), although it does not reach much beyond 50% for people in their thirties. But in conformity with hypothesis 1.5, the slope of this increase with age is clearly lower in 1990 than in 1981 (line 15). The same difficulties in getting established in the labour market are also manifest when we consider only the young people who are out of school and have a job (hypothesis 1.6, lines 16 through 18), or even only the subset of

the latter who have left the parental home (hypothesis 1.7, lines 19 through 21). Contingent work is thus not only a consequence of more people having to juggle the requirements of schooling and working at the same time: even those who have left school, found a job, and launched themselves into an independent form of cohabitation find it increasingly difficult to become established workers.

The results in Table 10.3 address the destandardization hypotheses. Living alone or with roommates (lines 1 through 3) is of course less common among very young people (who live with their parents) and among older people (who have formed couples). It reaches its peak in the middle age groups, where it can involve as much as one young person in five. In conformity with hypothesis 2.1, this form of cohabitation is more widespread at the end of the period for people 21 and older and, surprisingly, especially after age 25: in 1981, spousal unions used to be a more tightly followed norm among young people who had reached the threshold of the mid-twenties. Single-parenthood (lines 4 through 6) still is very much a minority lifestyle, even among the older group, where it does not quite reach one person in twenty. While changes over the period are not dramatic, there is a slight increase of the proportion of single-parents at ages 21 and beyond. Other forms of familial solidarity (living with brothers and sisters, aunts and uncles, grandparents) as depicted in lines 7 through 9, present just about the same characteristics as living alone or with roommates: they are more widespread in the middle of the age range, and their use increases during the period in all but the younger categories. These living arrangements are increasingly used by people who want or need to leave the parental home, and yet cannot or would not form a couple.

Pressed between the necessity of pursuing their schooling and the difficulties of the labour market, young people have organized their lives in different ways, especially those remaining in the parental home. What do young people do in the cluttered nest? While the mixed status of being simultaneously a student and a worker (hypothesis 2.2) is quite widespread in 1981 at ages 15 through 18, it decreases quite dramatically at later ages. This pattern has expanded dramatically over the decade in all age groups, and especially among the 24 and younger group (line 12 of Table 10.3). Two separate processes are probably at work simultaneously: students now work on the side to fund their consumption needs, and young

Table 10.3  
Data Patterns for the Destandardization Hypothesis

		Age						
		15 to 16	17 to 18	19 to 20	21 to 22	23 to 24	25 to 29	30 to 34
		Percent						
Living Alone or with Roommates								
1	1981	-	4.2	12.5	17.0	20.2	15.6	11.2
2	1990	-	3.6	11.1	19.5	19.6	19.7	15.8
3	Change	-	-0.6	-1.4	2.5	-0.6	4.1	4.6
Living as a Single Parent								
4	1981	-	0.0	0.7	1.7	2.3	2.9	4.4
5	1990	-	-	0.7	2.0	2.7	2.9	4.7
6	Change	-	-	0.0	0.3	0.4	0.0	0.3
Living in Other Types of Familial Solidarity								
7	1981	0.9	1.9	2.7	5.0	4.2	2.6	1.8
8	1990	0.8	1.8	4.3	5.6	5.6	4.5	2.3
9	Change	-0.1	-0.1	1.6	0.6	1.4	1.9	0.5
Student/Workers Living with their Parents								
10	1981	31.5	32.3	13.8	5.8	1.8	0.2	-
11	1990	41.1	43.3	22.8	11.7	5.7	0.6	-
12	Change	9.6	11.0	9.0	5.9	3.9	0.4	-
13	Observed/Expected	1.02	1.11	1.04	0.99	0.98	1.17	-
Inactive or Contingent Workers Living with their Parents								
14	1981	7.0	25.5	30.9	19.9	11.8	4.8	1.9
15	1990	3.5	15.9	27.9	21.7	17.1	8.4	3.0
16	Change	-3.5	-9.6	-3.0	1.8	5.3	3.6	1.1
17	Observed/Expected	1.20	0.98	0.90	0.98	1.02	1.13	1.00
Established Workers Living with their Parents								
18	1981	-	3.3	11.9	14.5	9.3	5.3	2.5
19	1990	-	2.1	8.4	10.8	13.3	8.0	3.3
20	Change	-	-1.2	-3.5	-3.7	4.0	2.7	0.8
21	Observed/Expected	-	1.47	1.30	1.08	1.21	0.93	0.93

**Note:** - indicates sample variability higher than 25%, in all other cells sample variability is below 16.5%. See the Appendix for derivation of expected outcomes in lines 13, 17, and 21.

**Source:** Calculations by authors using Statistics Canada, Survey of Consumer Finances.

people in their twenties live in some ambiguity as to whether they are students who have to work, or workers who keep improving their skills in school. The end result is that at almost all ages beyond 17, student/workers now account for at least as a high a proportion of school attendees as do full-time inactive students.

While these trends are descriptively true, can we say that young people favour this living arrangement to a larger extent than would be expected from the simple combination of separate trends leading towards later leaving home, longer schooling, and more widespread involvement in the labour market? A comparison of observed changes in the proportion of student/workers to changes expected from the simple combination of the evolution in the three underlying variables (line 13) reveals that genuine destandardization is found in at least some of

the age groups: among people aged 17 to 20, the student/worker living arrangement definitely attracts people disproportionately, and it seems to become a lifestyle of its own (we disregard the even larger ratio for the 25 to 29 year olds, because the numbers are not entirely reliable).

A number of young people remain in their parents home while being (in most cases) out of school: many are marginal to the labour market (hypothesis 2.3), but one even finds young people who have not moved out in spite of being established in jobs (hypothesis 2.4). During 1981 such patterns used to be rare among the very young, increasingly widespread for those in their early twenties, and again quite rare later on, especially after 25. Modest but systematic changes have taken place over the decade. These patterns are now less widespread among people 20 or younger, who attend school in greater

Table 10.4

**Age-Specific Coefficients of Dissimilarity Between the Distributions of Men and Women by Type of Living Arrangement, 1981 and 1990**

	Age						
	15 to 16	17 to 18	19 to 20	21 to 22	23 to 24	25 to 29	30 to 34
	Percent						
1981	3.1	8.3	21.5	21.6	26.6	32.9	41.7
1990	5.2	6.9	16.5	19.4	25.5	23.4	31.3
Change	2.1	-1.4	-5.0	-2.2	-1.1	-9.5	-10.4

proportions as students or student/workers, but they are increasingly found beyond that age. People aged 23 to 29, in particular, seem to have more difficulties gaining from the labour market what is required to leave the parental home; it may also be that social norms are changing in this respect.

Do changes in these patterns go beyond what one would expect from changes in the underlying distributions? The proportion of inactive people or contingent workers living in the parental home (line 17) seems to have somewhat decreased for people aged 17 to 22, where lengthened schooling is more popular; but it has gone up (in the net) beyond that point, probably reflecting the gap that separates these people from an independence beyond the age at which more schooling is a strategy. We also note the paradox that while the proportion of 15 and 16 year olds who are inactive or contingent has decreased by half, this seems to be less of a fall than one would expect; there might be some minimal proportion of even very young people who just won't pursue schooling.

As far as the propensity of established workers to still live with their parents is concerned (line 21), the net changes seem to contradict the gross ones. At the end of the period, younger age groups have a lower proportion of people in this living arrangement, but it has not decreased as much as one would expect from increased schooling and the postponement of entry into the labour market; there still seems to be a fair proportion of young people with an affinity for the lifestyle corresponding to this living arrangement. Conversely, the somewhat increased proportion of established workers living in the parental home age 25 and over remains below expectations: at such ages, the attraction of moving out when the resources are sufficient seems to take over.

To what extent are the changes just examined similar across gender? One way to address gender differences is to compute age-specific coefficients of dissimilarity between male and female distributions into living arrangements. As illustrated in Table 10.4, gender differences increase dramatically as people age: in 1981, they were barely noticeable at age 15 and 16, but they reached about one fifth of the potential range by age 19 and 20, and two fifths after age 30. Differences have decreased very significantly at all ages during the decade (hypothesis 3.1), and especially after age 25; there is only a slight exception among the 15-16 years old, where women are somewhat more taken with the student/worker model. Attenuation is very substantial, then, but gender roles and stereotypes have not, by a far cry, ceased to exercise a powerful influence on how young people live.

Part of this attenuation comes from the abandonment by women of roles which involve marginality with respect to both school and the labour market (hypothesis 3.2). Such marginality has shrunk dramatically, particularly for those aged 23 and beyond, while it has remained almost absent among men (Table 10.5, lines 1 through 7).

There are common threads to what happens to young men and women with respect to living with their parents and to forming couples: the propensity to live with parents decreases with age (lines 8 through 14), but the decline was significantly steeper in 1981 than in 1990; and couples are gradually formed in an overwhelming proportion of cases as people age (lines 15 through 21), but this propensity has slowed down significantly over the period.

Men and women are, however, experiencing these trends in somewhat different ways. It used



Table 10.5  
The Attenuation Hypothesis

			Age						
			15 to 16	17 to 18	19 to 20	21 to 22	23 to 24	25 to 29	30 to 34
Inactive People Living in Couples									
1	1981	Women	-	2.3	6.6	11.2	18.9	27.1	30.4
2		Men	-	-	-	0.9	1.0	2.1	2.5
3		Difference	-	-	-	-10.3	-17.9	-25.0	-27.9
4	1990	Women	-	1.3	2.1	5.6	7.3	12.2	16.3
5		Men	-	-	-	-	1.1	2.2	3.6
6		Difference	-	-	-	-	-6.2	-10.0	-12.7
7	Change in Gender Difference		-	-	-	-	11.7	15.0	15.2
Staying in the Parental Home									
8	1981	Women	97.6	86.6	59.3	39.9	17.4	7.0	2.8
9		Men	98.6	94.4	80.8	55.9	34.4	14.2	6.0
10		Difference	1.0	7.8	21.5	16.0	17.0	7.2	3.2
11	1990	Women	98.2	90.8	69.8	46.7	31.8	13.6	3.9
12		Men	98.9	93.8	82.3	63.9	48.9	22.2	9.1
13		Difference	0.7	3.0	12.5	17.2	17.1	8.6	5.2
14	Change in Gender Difference		-0.3	-4.8	-9.0	1.2	0.1	1.4	2.0
Living as a Couple									
15	1981	Women	-	3.9	20.8	37.5	56.8	71.9	78.8
16		Men	-	0.0	5.7	19.2	37.9	63.7	77.4
17		Difference	-	-3.9	-15.1	-18.3	-18.9	-8.2	-1.4
18	1990	Women	1.3	2.4	11.1	23.9	41.9	61.3	73.5
19		Men	-	0.0	2.9	10.3	21.4	49.0	67.5
20		Difference	-	-2.4	-8.2	-13.6	-20.5	-12.3	-6.0
21	Change in Gender Difference		-	1.5	6.9	4.7	-1.6	-4.1	-4.6
Living Alone or with Roommates									
22	1981	Women	-	5.4	15.4	14.8	18.3	13.2	8.7
23		Men	-	2.3	10.0	19.5	21.9	18.1	13.0
24		Difference	-	-3.1	-5.4	4.7	3.6	4.9	4.3
25	1990	Women	-	3.1	11.8	18.6	16.1	15.5	12.0
26		Men	-	2.8	10.6	20.2	23.4	24.1	19.9
27		Difference	-	-0.3	-1.2	1.6	7.3	8.6	7.9
28	Change in Gender Difference		-	2.8	4.2	-3.1	3.7	3.7	3.6
Being a Single Parent									
29	1981	Women	-	-	1.4	3.0	4.6	5.3	7.9
30		Men	0.0	0.0	0.0	0.0	0.0	0.5	0.7
31		Difference	-	-	-1.4	-3.0	-4.6	-4.8	-7.2
32	1990	Women	-	-	2.0	4.2	5.2	5.5	8.5
33		Men	-	0.0	0.0	0.0	0.0	0.0	0.6
34		Difference	-	-	-2.0	-4.2	-5.2	-5.5	-7.9
35	Change in Gender Difference		-	-	-0.6	-1.2	-0.6	-0.7	-0.7
Living in Other Types of Familial Solidarity									
36	1981	Women	-	1.8	2.8	4.9	2.9	2.1	1.3
37		Men	0.9	1.9	2.6	5.1	5.7	3.2	2.3
38		Difference	-	0.1	-0.2	0.2	2.8	1.1	1.0
39	1990	Women	-	1.6	5.3	6.6	5.1	4.3	1.9
40		Men	-	2.1	3.3	4.8	6.1	4.6	2.7
41		Difference	-	0.5	-2.0	-1.8	1.0	0.3	0.8
42	Change in Gender Difference		-	0.4	-1.8	-2.0	-1.8	-0.8	-0.2

**Note:** - indicates sample variability greater than 25%.

**Source:** Calculations by authors from Statistics Canada, Survey of Consumer Finances

to be that women left the parental home earlier than men at all ages past 16. This is still true in 1990, but the difference has narrowed at ages 17 to 20. Similarly, women formed couples much earlier than men (presumably with older partners). This is still largely true in 1990, but the

locus of the difference has changed: young women between the ages of 17 and 22 have narrowed the gap with their male contemporaries, while the difference between genders has actually increased from age 23 on, and especially among those who have attained the age of 25.

Overall, young men 21 and older have kept their higher propensity to stay with their parents as well as their lower propensity to form couples.

These differential changes in relations of cohabitation correspond to changes in relations to school and to work. Young females between the ages of 17 and 20 stay home to increase their schooling, both as students and as student/workers, thus making more or less the same choices as young males; at ages 19 and 20, young women are even more involved in schooling than young men in 1990, in marked contrast with the situation with 1981. The same converging process also happens, but to a more limited extent, among young women and men aged 21 to 29. As far as getting a job is concerned—again for young people living with their parents—both men and women have the same experience: 1990 witnesses a fewer proportion of 17 to 22 year olds with non-standard status, and a higher proportion of those 23 and older.

The circumstances of men and women are symmetric when young people living in couples are considered. The depletion of the ranks of men from age 21 on (or even from age 19) seems closely related to their inability to find a job, especially an established job. Young women do experience a decrease in their propensity to form couples, but the gap between them and men increases from age 23 on (line 21 of Table 10.5); this is accompanied by a decline in their level of inactivity, and a rise in their ability to secure and hold on to a job.

Single-parenthood is almost totally a female affair (lines 29 through 35), and increasingly so. As expected, its incidence grows with age, but there are almost no noticeable changes during the period in the proportion of young people in such living arrangements, and in their levels of activity in the school system and the labour market.

Living alone, with roommates, or in other familial solidarity forms appear as alternative solutions for those who wish or have to leave the parental home, while not forming a couple or a new family. There is a greater tendency of women between the ages of 17 and 20 to display this pattern than men, but somewhat less of a tendency at older ages (particularly in the case of those living alone or with roommates). This reflects the greater tendency of young women to form couples. This general pattern is reinforced during the period in the case of living alone or with roommates. In particular, there are growing

proportions of men 25 and older who live in such households while attending school, working, being unemployed or simply being inactive.

#### 4. Conclusion

Ten years appears to be a short period for the vast redefinition of living arrangements of young people that took place in Canada during the 1980s. Economic circumstances have changed in fundamental ways. Young people, and to a significant extent their families, have devised new ways to cope with transformations relating to the nature and structure of jobs, changing skill requirements in the labour market, and higher shelter costs. They have prolonged their schooling, taken jobs (often contingent ones) earlier, combined schooling with paid work, stayed home longer, delayed the formation of spousal unions, and increasingly lived outside standard family contexts. They have also redefined gender roles to a significant extent, with women abandoning the housewife status, prolonging their schooling, and taking on jobs. In spite of this convergence, substantial gender differences remain: paradoxically, women are most likely to prolong their schooling, leave home (though later than used to be the case), find jobs, and form couples (presumably with older companions).

Even though more people now live alone or with roommates, and even though unions are formed much later, families—parental families in most cases, but also extended families—still play a major role as a haven for young people, as a place where they can deploy their new coping strategies with respect to schooling and the labour market. One can only speculate as to how these arrangements are negotiated within families, but it is notable that the relationship often assumes that the young take charge of at least part of their living expenses through paid work, even in the case of students.

In the longer run, the values of young people will probably be altered by this prolonged cohabitation with parents and the development of non-standard living arrangements. Among other things, it will be interesting to observe how many of them will have children, when, in what numbers.

There is still a lot to be explored about the trends identified in this chapter, especially with proper longitudinal data. On the basis of our overview of the changing distribution of living arrangements, one could open up each of these

types and provide a more accurate picture of the situation young people face: where are they in their schooling trajectory, what is their exact position in the labour market (occupation, earnings), have they had children? The story could be brought up to the more recent years, and the precise shape of the evolution through time could be traced, in parallel to changes in the various elements of the economic conjuncture. This would provide us with a better grasp of how young people invent their own history, but do so under circumstances not of their own choosing.

## Appendix

### The typology of living arrangements

The construction of the typology of living arrangements requires that we first measure all three underlying dimensions. Relations to schooling are readily measured in the Survey of Consumer Finances in a form that is suitable for our purposes: young people are either studying full-time, or part-time, or not at all. Relations of cohabitation are a bit more complex, since we have to take into account both the type of economic family and the position of the individual in relation to the head of this family. We have constructed five types: [1] young people who still live with their parents (children with respect to the head, living in all family types); [2] those who have formed a couple (head of the economic family or spouse of the head, in all families with both spouses present); [3] those who live outside a family context, either by themselves or with roommates (heads of economic families with only one person); [4] single parents who do not live with their own parents (heads of single parent economic families); and [5] young people who live within family arrangements other than with their parents (for example, with their siblings or their grandparents; these have an "other" link to the head of the economic family, or they are heads of "other" economic families).

Relations to paid work are represented in even more detail, since we want to capture the diverse and volatile experience of young people with respect to earning a living. We have used four variables: activity (employed, unemployed, and inactive), duration of employment (at least one year, less than one year, undefined), duration of unemployment (more than 13 weeks, 13 weeks or less, zero), and full/part-time status. We have constructed seven types, ranging from inactivity to the standard job: [1] inactivity (inactive,

undefined duration of employment, zero weeks of unemployment); [2] unemployment for a limited period (either inactive or unemployed, with undefined duration of employment, and unemployed for 13 weeks or less); [3] unemployment for a longer period (either inactive or unemployed, with undefined duration of employment, and unemployed for more than 13 weeks); [4] part-time work with short tenure (either employed, unemployed, or inactive, with duration of employment less than one year, and part-time); [5] part-time work with long tenure (either employed, unemployed, or inactive, with duration of employment one year or more, and part-time); [6] full-time work with short tenure (either employed, unemployed, or inactive, with duration of employment less than one year, and full-time); [7] full-time work with long tenure (either employed, unemployed, or inactive, with duration of employment one year or more, and full-time). Of course, the overwhelming majority of people in types 2 and 3 come from the unemployed activity category, and the overwhelming majority of people in types 4 through 7 come from the employed activity category.

The combination of these three dimensions produces  $3 \times 5 \times 7 = 105$  possible types, 99 of which contain any cases. As can be seen in Table 10.A1, most of the 36,499 young people in the 1981 sample belong to a limited number of categories, with about 60% of all cases found in 6 of these, and another 28% in the next 12 largest. A reduction of this typology is thus required and possible. We regrouped categories that are relatively similar from the substantive point of view of living arrangements, while managing to have under each final type a sufficient number of cases to be able to pursue the analysis. This same frequency table indicates, in boldface characters within each cell, to which of the final seventeen types each of the original combinations has been assigned.

### Comparing observed and expected proportions in various living arrangements

We have to compare changes in the observed proportions of people in the various living arrangements from 1981 to 1990 to changes that we would expect under the assumption that such changes are due only to changes in the underlying three variables (relations of cohabitation, relations to schooling, and relations to paid work). We first compute the expected proportions by simply multiplying, within each age category, the probabilities obtained for each variable (the expected probability of having a student/worker living with parents would simply be



Table 10.A1  
The Aggregation of Cohabitation, Schooling and Work Categories

Relations to Schooling	Relations to Work	Relations of Cohabitation									
		With Parents		In a Couple		Alone or with Roommates		Single Parents		Other Forms of Familial Solidarity	
		Sample size	Type	Sample size	Type	Sample size	Type	Sample size	Type	Sample size	Type
Full-time Schooling	Inactive	4,150	1	229	6	233	11	29	16	88	17
	Unemployment short	790	2	28	6	63	11	4	16	19	17
	Unemployment long	132	2	11	6	13	11	0	16	4	17
	Part-time work short tenure	1,209	2	32	6	59	11	0	16	26	17
	Part-time work long tenure	923	2	28	6	40	11	4	16	7	17
	Full-time work short tenure	36	2	13	6	13	11	0	16	0	17
	Full-time work long tenure	51	2	21	6	5	11	0	16	3	17
Part-time Schooling	Inactive	45	1	54	6	9	11	4	16	3	17
	Unemployment short	23	2	13	6	10	11	0	16	2	17
	Unemployment long	25	2	13	6	1	11	2	16	0	17
	Part-time work short tenure	49	3	20	8	9	12	0	16	1	17
	Part-time work long tenure	18	3	32	8	14	12	1	16	3	17
	Full-time work short tenure	83	3	77	8	40	12	3	16	1	17
	Full-time work long tenure	92	4	206	9	115	13	8	16	16	17
Not in School	Inactive	899	5	3,539	10	166	14	289	15	83	17
	Unemployment short	539	5	615	7	188	14	48	15	74	17
	Unemployment long	671	5	528	7	161	14	45	15	52	17
	Part-time work short tenure	254	3	442	8	86	12	34	16	17	17
	Part-time work long tenure	153	3	680	8	55	12	22	16	8	17
	Full-time work short tenure	1,583	3	2,280	8	1,065	12	113	16	219	17
	Full-time work long tenure	2,120	4	7,511	9	2,132	13	239	16	334	17

the product, for a given year, of the general probability of being a student, of being a worker, and of living with parents, all of these within a given age category). We regroup the 105 expected probabilities obtained into the same 17 types as the observed probabilities. We thus have, at the end of the calculations, four distributions of numbers over the 17 types: observed frequencies in 1981 and 1990, and expected probabilities, under the assumption of independence between the three underlying variables, again in 1981 and 1990. We then compute the odds for an individual of being in a given type, as opposed to all other types, in 1981 and in 1990, both for the observed and the expected frequencies. We can then compute a ratio of these odds for 1990 over 1981, again for observed frequencies and for expected frequencies. Taking the ratio of these odds ratios (observed over expected), we obtain for each type a single number which tells us how far the observed change in proportion is from equality with the expected change in proportion (a ratio of odds ratios equal to one). Anything quite above a value of one says that over the period, this type of living arrangement has become more frequent

than we would expect from changes in the distributions of the three underlying variables; a ratio inferior to one tells us that the change in the observed frequency of this type has not quite kept up with the evolution we would have expected from changes in the distributions of the underlying variables.

Notes

We wish to thank Garnett Picot and Ted Wannell for their helpful comments on earlier drafts. We also thank Statistics Canada for making the data available to us, and the organizers of the Intergenerational Equity conference for providing us with an opportunity to present our ideas.

<sup>1</sup> Even in the absence of proper longitudinal data, we will to a certain extent be able to disentangle age and cohort effects: as we compare the distribution into living arrangements of people reaching the same age at two different points in time, we control for the former effect and isolate the latter. For lack of a better solution, we make the usual (but contestable)

assumption that the differences between two points in time between the differential profile of age groups will reveal how young people changed, over the period, in how they come of age. This appears, on the one hand, as a reasonable assumption given that we take into consideration all of the population at all times, in an age range where not too many die or move out of the country; in other words, self-selection out of our scope of observation over time is minimal, and we can fully examine the redistribution of young people as they age.

## Bibliography

- BOURDIEU, Pierre (1980). "La jeunesse n'est qu'un mot." *Questions de sociologie*. Paris: Editions de Minuit.
- BOYD, Monica and Edward T. PRYOR (1989). "The Cluttered Nest: The Living Arrangements of Young Canadian Adults." *Canadian Journal of Sociology*. Vol. 15, 462-279.
- BOYD, Monica and Doug NORRIS (1994). "The Cluttered Nest Revisited: Young Canadian Adults at Home in the 1990s." Center for the Study of Population, Florida State University. Unpublished manuscript.
- GALLAND, Olivier (1993). *Les jeunes*. Paris: La Découverte, Coll Repères, nouvelle édition.
- GALLAND, Olivier (1985). "Formes et transformations de l'entrée dans la vie adulte." *Sociologie du travail*. Vol. 17, 33-52.
- GAUTHIER, Madeleine (1994). *Une société sans les jeunes?* Québec: Institut québécois de recherche sur la culture.
- GOLDSCHIEDER, Frances and Calvin GOLDSCHIEDER (1994). "Composition familiale, soutien parental et départ du foyer des jeunes Américains au XXe siècle." *Cahiers québécois de démographie*. Vol. 23.
- IRWIN, Sarah (1995). *Rites of passage*. London: Sage.
- MORISSETTE, René, John MYLES and Garnett PICOT (1993). "What is Happening to Earnings Inequality in Canada?" Statistics Canada, Analytical Studies Branch Research Paper No. 60.
- MYLES, John (1995). "After the Golden Age: Labour Market Polarization and Canadian Public Policy." Social Sciences Federation of Canada, "Breakfast on the Hill", Seminar series, Parliament of Canada, Ottawa, October 5, 13p.
- RICARD, François (1992). *La génération lyrique: essai sur la vie et l'oeuvre des premiers-nés du baby-boom*. Montréal: Boréal.
- RIDDELL, Craig (1995). "Human Capital Formation in Canada." In Keith Banting and Charles Beach (editors). *Labour Market Polarization and Social Policy Reform*. Kingston Ontario: School of Policy Studies, Queens University.
- WHITE, Lynn (1994). "Coresidence and Leaving Home: Young Adults and their Parents." *Annual Review of Sociology*. Vol. 20, 81-102.





Intergenerational Equity: Policy and Data Implications

SUSAN A. MCDANIEL

Generation is the astrology of the millennial epoch, with Boomers, Busters, Gen-Xers, and Greedy Grannies (whether greedy or not) replacing zodiac signs to explain much of what we are as individuals and to guide us collectively through the unknown future. However, the links between these compelling popular images and actual data, analysis, or policy issues are far from clear or straightforward. Accordingly, I examine three questions in this paper: [1] Does existing knowledge about intergenerational transfers, both public and private, provide the basis for effective policy choices? What is missing? What is needed, in particular by Canada's statistical system? [2] With an aging society, rapidly shifting labour markets, and shrinking social transfers in Canada, is a new generational compact emerging? And [3] What are the roles of differing models of inter-generational transfers, indeed of the demographic concept of generation itself, in defining the field of policy options for Canadians in the late 1990s? In addressing these questions, I rely on analyses and a framework developed in McDaniel (1997).

1. Does Existing Knowledge Provide the Basis for Effective Policy Choices?

The research summarized in the chapters of this book certainly go a long way in offering new and important information for the understanding of intergenerational dynamics, but they also point to some important gaps in knowledge and information. What lessons are learned? What more is needed? My reading suggests at least ten things.

[1] Conceptual and theoretical precision. Policy choices need context and a critical interrogation of research concepts. For example, intergenerational equity, as a concept, has been subjected to sustained

criticism, summarized by Phillipson (1996) and Walker (1996), and "...pronounced as unsuitable as a basis for conceptualizing the relationship between age cohorts or for policy development." (Walker 1996, p. 23). In this context, unsuitability stems from three central criticisms: [i] what is really at issue in many policy discussions are the fiscal implications of an aging population, not equity among generations; [ii] the concept is more a politically expedient use of demographic change than it is an empirical reality; and [iii] referencing people as being of a certain generation attributes to them characteristics they may not possess socially or economically. This was eloquently pointed out by Karl Mannheim in his classic 1952 essay on "The Problem of Generations," to paraphrase him, shared age does not a generation make.

- [2] More inter-disciplinary work. Taken together the essays in this book and those in the companion volume (Corak 1998) set an admirable example. Future work should recognize that intergenerational relations take place in a socio-economic context, involving both public and private transfers, exchanges, and expectations. The social and the economic dimensions of these relations are not two solitudes, although their guiding assumptions are very different (see Table 11.1).
- [3] The need for fewer assumptions about people in generations, who are often assumed to be completely alike. Wolfson et al. (1998), for example, recognize the need to distinguish individuals not only by age but also by gender and income.
- [4] Similarly, analysts should try to adopt some real and accurate sense of people of different ages in families, sharing and caring for each other. The image of competing generations,

Table 11.1  
**Three Models of Intergenerational Transfers:  
Basic Assumptions and Definitions**

1. Economic	
Dominant Concern	<ul style="list-style-type: none"><li>● Problems arising from transfers of resources among generations</li></ul>
Prevailing Concepts	<ul style="list-style-type: none"><li>● Fairness</li><li>● Individual and horizontal equity at age group level</li><li>● Incentives to work and save</li></ul>
Policy Questions	<ul style="list-style-type: none"><li>● Limiting tax burdens</li><li>● Curbing expenditures on social programs</li><li>● Increasing labour supply</li></ul>
2. Sociological	
Dominant Concern	<ul style="list-style-type: none"><li>● Transforming relations among generations in an aging society</li></ul>
Prevailing Concepts	<ul style="list-style-type: none"><li>● Power</li><li>● Status</li><li>● Security and insecurity</li></ul>
Policy Questions	<ul style="list-style-type: none"><li>● Status of older people and their social integration</li></ul>
3. Social Policy	
Dominant Concern	<ul style="list-style-type: none"><li>● Welfare of older people and quality of living standards of all generations</li></ul>
Prevailing Concepts	<ul style="list-style-type: none"><li>● Generational interdependence</li></ul>
Policy Questions	<ul style="list-style-type: none"><li>● Action to improve living standards for today's older people</li></ul>

of children and the old, is evocative of free-floating bands of urchins and seniors who are disconnected from families. This is unlikely. More research and data on the sharing of resources in families, both social and economic, is needed to build viable policy options.

- [5] A global sense of the magnitude of the flows between generations is needed, not only from today's old to today's young, but of the longer term historical flows. Some of this may be possible with simulations, some with longitudinal data such as the Survey of Labour and Income Dynamics (SLID), and some with the use of Generational Accounting. Examples of some of these are offered in Corak (1998).
- [6] Dynamism of intergenerational relations is not being fully captured with existing data. Reciprocity, interrelations, interdependencies and exchanges are only partially captured, some for the first time.

With SLID and other longitudinal survey data this will be partially addressed.

- [7] The transmission of "social capital," either in the public or private realm, is not well captured by the existing statistical system, although clearly some important aspects of relative advantage and disadvantage, and of social value and family transmission have been effectively assessed by the authors of Chapters 4 through 8.
- [8] Gaps exist in the measurement of the intergenerational transfer of risks. The focus often seems to be on the transfer of assets, income and taxes/transfers. This is vital to Canadian values of hard work and sacrifice for the benefit of one's children, even though the risks to health and well-being of parents might be large, thereby creating risks for children.
- [9] In my view, a vital policy question—that I emphasize in McDaniel (1997)—remains unaddressed, namely the degree to which

private generational transfers can substitute for diminishing public transfers. Almost nothing is known about this.

- [10] There is a need for the collection of more data on private intergenerational transfers including bequests, but also possibly gifts in kind and assistance of various sorts.

## 2. Is a New Generational Compact Emerging?

Walker (1962, 1-2) argues that "...industrial societies are confronting a new generational cross-roads." He quickly adds that this is not new to modern society: "In Britain there is evidence from the sixteenth century that when village communities were faced with economic hardship older people were sometimes marginalized and their financial relief portrayed as a burden on the community" (p. 24). So, the social construction of age-group conflicts predates today's debates about intergenerational equity by some 400 years! Added emphasis is given by Cheal (1987) who shows that there is nothing inexorable about life course and "net aid flows." In fact, based on the 1978 Family Expenditure Survey, he shows that the predominant flow is from older to younger age groups, contrary to prediction, prevailing theory, and the presumptions of most current models of intergenerational transfers.

Economic changes and the restructuring of the welfare state have necessitated the fashioning of a new generational compact, the contours of which are only beginning to emerge. I develop a typology of the new compact in McDaniel (1997), and am led to the conclusion that institutional changes in pensions, health care, social assistance, aids to independent living, child support and care, all imply shifts in both the public and private intergenerational compact.

The increase in the polarization of the status of young versus old, and of poor versus rich is now well documented: greater dependence of young adults due to insufficient incomes and access to jobs (Chapters 2 and 10), the polarization of educational opportunities (Chapter 8), of health outcomes (Chapter 9), of employment, earnings, social transfers and family characteristics (Chapter 2), and of net tax and transfers among pre-retirement and post-retirement cohorts (Hicks 1998, Murphy 1998). The questions that arise concern the degree to which polarization is the way forward for Canada, and the degree to which analyses along

generational lines are useful. Analyses along this dimension may be important in setting a context for policy, but can ultimately be diversionary from the real needs of those within each generation or group.

Three factors provide evidence of the emergence of new generational compacts, which may paradoxically, derive from generational and socio-economic polarization. First, generation is first and foremost a family concept, meaning that transfers within families, both economic (mobility and assets) and social (health, well-being, intellectual capital) make the notion that polarization is occurring among generations less compelling. An understanding of the nature and degree of intergenerational mobility as well as of the underlying mechanisms is central. This is why the findings in Chapters 4 and 5 are important. With polarization among current generations could come deeply exaggerated polarization among the next generation, as income, wealth, and social capital are transferred within families. The finding by Fortin and Lefebvre in Chapter 4 that greatest immobility occurs at the very top and very bottom of the income distribution lends support to this possibility. There is more evidence uncovered by Corak and Heisz in Chapter 5 who find that the residential mapping of socio-economic status as well as the nature of parental income matters to mobility. All the work in Chapters 6 through 9 help to fill in the details of the possible underlying mechanisms. Families are the central agents in making intergenerational transfers, in some ways making up for lost public transfers by pooling resources, in other ways, working to increase the polarization between rich and poor Canadians.

The second factor suggesting the emergence of a new generational compact is that generation per se is an increasingly inaccurate proxy for real dependency, social or economic, as the categories of dependency blur and correspond less with life course stages. The labels "worker," "pensioner," and "child" may be less and less clear as workers have no work or are more insecure and less continuously working, as pensioners have less access to pensions but are de facto retired, and as children increasingly work in part-time jobs to help support increasingly insecure families. The work in Chapter 10 underscores some of these points, but Mannheim (1952, p. 311) recognizes this issue clearly:

If we speak simply of "generations" without any further differentiation, we risk jumbling together purely biological phenomena and others which are the product of social and



cultural forces: thus we arrive at a sort of sociology of chronological tables which uses its bird's-eye perspective to "discover" fictitious generation movements to correspond to the crucial turning-points in historical chronology.

Third, a new compact may be emerging because the concept of public intergenerational transfers should be widened to include workplace policies (McDaniel 1997, Gunderson and Hyatt 1998). The example I use is the de facto intergenerational transfer effect of seniority policies that potentially widen the gap between the productivity profile and the wage profile, entailing an unintended transfer from younger workers to older workers. That seniority policies are not as strong during the recent period of restructuring in Canada may have implications, thus far uncaptured, for intergenerational transfers, and could mark another way in which a new generational compact is developing. More data and research on these subtle and "hidden" aspects of intergenerational relations would greatly assist policy makers.

### 3. Differing Models of Intergenerational Transfers and Policy

Three different models of intergenerational transfers with their basic defining assumptions are presented in Table 11.1. What is contested is not the assumptions of each model, but the policy choices each points toward. That tension exists on these choices is evident in recent federal and provincial budgets that ultimately balance, in varying ways, deficit considerations against living standards and quality of life concerns (primarily for the old, but also for vulnerable children).

In each of these models generation means something quite different, as do generational links and responsibilities. In the economic model, generation typically is synonymous with age group, sometimes large groupings (for example, 65 and older or older than 18 years of age) or even single years of age. This is an accounting perspective, reminiscent of Mannheim's concerns about the definition of generation rather than a social reflection of networks of responsibilities and entitlements that connect people in society (McDaniel 1996). With the sociological model, the relational aspect of generation is present, but no clear definition is widely used. In the social policy model, the sense is of moral norms and obligations of generations, one to another, obligations that are enhanced by state policies.

In all three models, the demographic concept of generation as the time needed to bring one's offspring to the stage of reproduction, is not the definition used.

Mannheim (1952, 293-94) calls attention to a missing policy-relevant aspect of intergenerational transfers, at least missing from the existing knowledge base in Canada. It is the transmission of ideas, mindsets, progress. He has this to say:

...our culture is developed by individuals who come into contact anew with the accumulated heritage... a fresh contact (meeting something new) always means... a novel approach to assimilating, using, and developing the proffered material... in the case of generations, the "fresh contact" with the social and cultural heritage is determined not by mere social change... it facilitates re-evaluation of our inventory and teaches us both to forget that which is no longer useful and to covet that which has yet to be won.

In intergenerational transmission are the seeds of innovation.

In this essay I point out the narrowness of many popular approaches to the concept of intergenerational equity. My analysis calls for a broadening and deepening of data collected, analyses undertaken, and policy questions posed. To illuminate policy questions on intergenerational relations, much more needs to be known about intergenerational transfers than simple analyses of dependency ratios and balances in payouts allow. The papers in this volume open the door to more complex and nuanced data capture and analysis work on the complexity of intergenerational relations.

### Bibliography

- CHEAL, David (1987). "Intergenerational Transfers and Life Course Management: Towards a Socio-Economic Perspective." In A. Bryman, P. Allott and T. Keill (editors). *Rethinking the Life Cycle*. London: MacMillan.
- CORAK, Miles (editor) (1998). *Government Finances and Generational Equity*. Ottawa: Statistics Canada Catalogue No. 68-513-XPB.
- GUNDERSON, Morley and Douglas HYATT (1998). "Intergenerational Considerations of Workers' Compensation Unfunded Liabilities." In Miles Corak (editor). *Government Finances and Generational Equity*. Ottawa: Statistics Canada Catalogue No. 68-513-XPB.

- HICKS, Chantal (1998). "The Age Distribution of the Tax/Transfer System in Canada." In Miles Corak (editor). *Government Finances and Generational Equity*. Ottawa: Statistics Canada Catalogue No. 68-513-XPB.
- MANNHEIM, K. (1952). "The Problem of Generations." In *Essays on the Sociology of Knowledge*. London: Routledge and Kegan Paul.
- McDANIEL, Susan A. (1997). "Intergenerational Transfers, Social Solidarity, and Social Policy: Unanswered Questions and Policy Challenges." *Canadian Public Policy/ Canadian Journal of Aging*, Joint Issue. Vol. 23, pp. 1-21.
- McDANIEL, Susan A. (1996). "Serial Employment and Skinny Government: Reforming Caring and Sharing in Canada at the Millennium." In *Towards the XXI Century: Emerging Socio-Demographic Trends and Issues in Canada*. Ottawa: Federation of Canadian Demographers.
- MURPHY, Brian (1998). "The Impacts of Changing Tax/Transfer Systems on the 'Lifetime' Distribution of Net Taxes: 1984 to 1995." In Miles Corak (editor). *Government Finances and Generational Equity*. Ottawa: Statistics Canada Catalogue No. 68-513-XPB.
- PHILLIPSON, Chris (1996). "Intergenerational Conflict and the Welfare State: American and British Perspectives." In Alan Walker (editor). *The New Generational Contract: Intergenerational Relations, Old Age, and Welfare*. London: University College London.
- WALKER, Alan (1996). "Introduction: The New Generational Contract." In Alan Walker (editor.) *The New Generational Contract: Intergenerational Relations, Old Age and Welfare*. London: University College London.
- WOLFSON, M.C., G. ROWE, X. LIN, and S.F. GRIBBLE (1998). "Historical Generational Accounting with Heterogeneous Populations." In Miles Corak (editor). *Government Finances and Generational Equity*. Ottawa: Statistics Canada Catalogue No. 68-513-XPB.

## Intergenerational Equity: The Objectives of Policy

BOB BALDWIN

### 1. Equity for Future Generations

A great deal of concern has been expressed in the chapters of this book and in those of the companion volume about the current situation of both young adults and children in Canada (Corak 1998). With respect to young adults, the difficulty of gaining well paid employment and attaining a reasonable standard of living is a focus of many of the chapters. Indeed, as Morissette illustrates in Chapter 3, young men are on an earnings trajectory that is much lower in relation to older cohorts than has been typical in the past. The condition of children and the rise in child poverty is often dealt with as a point in time problem. Yet, it is clearly related to the situation of young adults. Moreover, a number of the chapters shed valuable light on the intergenerational transmission of social and economic status as well as a variety of behavioural characteristics. Notwithstanding the variety of concerns about the status of children, however, horizontal equity is not

raised as an issue. Concern for younger generations has also focussed on their ability to financially support a growing elderly population and a large accumulated public debt.

To gain a perspective on the issues that have and have not been covered by the authors I propose to note the key elements in the legacy that younger generations should hope to receive from their predecessors. In view of the comments that I will make later about the elderly I should make it clear that central aspects of the prevailing life cycle are taken as given: children live with a parent or parents and acquire education and skills until late adolescence or young adulthood when they enter the labour market and form their own household more or less at the same time. (The work in Chapter 10 suggests that this process is not in fact as immutable as I make it out to be.) The immediate standard of living in childhood is determined primarily by transfers from the parents earned income, although the authors of



Chapter 2 draw attention to the increasingly prominent role of public transfers for low income families in the recent past.

Younger generations should hope to inherit:

- [1] a public and private capital stock of sufficient quantity and quality that it can provide good employment opportunities for everyone who is willing and able to work;
- [2] knowledge and skills that permit productive employment on the most modern technologies, the capacity to invent, and participation in the social and political life of the community;
- [3] a natural environment that supports both economic production and recreational activity; and
- [4] social peace, both as an end in itself, and as a support for the enjoyment of material well being and as a facilitator of its production.

These conditions have not emerged as an explicit focus of discussion in most of the chapters, but implicitly most of them are addressed.

Generally speaking the research dealing with the labour market status of young adults—principally Chapters 2, 3, and 10 but also 4 and 5—can be viewed as a commentary on the quantity and quality of the capital stock. But it is striking that none of the chapters deals directly with the current or future capital stock. In addition, there is a connection between the issues dealt with in these papers and the conditions required for social peace. The intergenerational and point-in-time inequalities that are documented can fairly be construed as potential contributors to a lack of social peace. The several chapters that document the transmission of socio-economic inequality as well as other social behaviours and characteristics (Chapters 4 though 9), add important dimensions to our understanding of the transmission of inequality through time. There is a risk that the perpetuation of social and economic exclusion from one generation to the next will undermine the stake that the excluded will feel in maintaining a stable society.

The chapter by de Broucker and Lavallée (Chapter 8) deals directly with equipping younger Canadians with the knowledge and skills required for life in the labour market and in the wider society. It brings the good news of a general increase in attained levels of education and

literacy. But it also brings the unfortunate news that closing relative gaps in attainment from one generation to the next is difficult unless one is very well off.

Finally, there is little to be found in the chapters of this book or in Corak (1998) that bears on the protection of the natural environment.

Two final issues are worth noting. First, it should be clear that the legacy required by younger generations can be understood in large part through conventional measures of economic well-being. But it also encompasses dimensions that are not thoroughly understood in that way. This is most evident when environmental well-being is considered. Considerations of social exclusion and security, and acquiring knowledge as an intrinsic good, also suggest the need for supplementary measures of well-being. Debates on what constitutes well-being and how to measure it are to be welcomed and encouraged. Second, it is important to recognize that progress on all dimensions of the legacy have involved public and private initiatives in recent decades. The public sector has been a major direct source of employment opportunities in the post World War II period. It has been a particularly important source of good employment opportunities for women. The combination of publicly administered institutions and publicly financed private institutions have played central roles in the acquisition of skills and knowledge. Efforts to date on environmental protection have relied heavily on a combination of government regulatory, tax and spending measures. Taxes, transfers and labour market regulations have contributed to the preservation of social peace by limiting inequality.

At one level it is a matter of stating the obvious to note that public initiatives have played an important role in contributing to the legacy inherited by younger generations. But the prevailing spirit of market liberalization runs the risk of thoroughly undermining this role.

## 2. Equity in Retirement Arrangements

One of the specific concerns that has been raised about the situation of today's young people is that they will face a crushing burden when it comes to financing pay-go public pension arrangements. In turning to this issue, two preliminary points should be made.

First, given the recent but now deeply entrenched social practice of retirement, the older



members of the population are no longer deriving the bulk of their income from employment, nor are they expected to. The central question becomes how to make sure that this large and growing number of retired people have incomes that are reasonable by prevailing standards without imposing an intolerable burden on younger generations. Unlike the situation with the pre-employed young, income and care for the elderly is provided mainly outside the framework of intra-family transactions.

Second, since the issue of the cost of retirement income programs has been cast in large measure in terms of the aging of the baby boom generation, it is important to clarify that a much longer term process of the aging of society is underway. Indeed, it is the baby bust that followed 1966, rather than the baby boom that is the chief agent of change. Thus, pay-go pension costs in Canada remain virtually unchanged after the baby boom has passed through the retirement years. Indeed, the boomers and the members of Generation X share the experience of paying more for their CPP/QPP benefits than the previous generation, while receiving the same level of benefits. The baby boom and Generation X share more in common with each other in terms of the balance of their contributions and benefits than either does with preceding or succeeding generations.

In contemplating the aging of the population, it is important to bear in mind the income situation of the currently elderly, and what the retirement income prospects are for the future elderly if current arrangements are unchanged.

In this regard, there is some good news to report. The incidence of low income has been declining although it remains far too high, especially for the single elderly, most of whom are women. Moreover, it appears that many people make the initial transition from work to retirement quite comfortably. A comfortable transition seems to be associated with years of participation in a "good" workplace pension. But many do not even make the initial transition comfortably: incomes seem to decline during the retirement years compared to the population at large, and the transition from being a member of a couple to being a lone survivor is a source of declining living standards. It should be noted that most of what we "know" about these transitions are based on inference, given the absence of appropriate longitudinal data.

There are more grounds for pessimism than optimism when considering the incomes that existing arrangements are likely to generate for future retirees. Once again there is some good news: more older women will have CPP/QPP retirement benefits in their own right and that will help to reduce the incidence of low incomes. But bearing in mind the relatively low rates of female participation in workplace pensions, there may not be a corresponding improvement in the degree to which women retirees maintain their standard of living in retirement. Further, there are labour market developments that reduce the likelihood that people will be members of workplace pensions in the future. It is worth noting that women and others who are disadvantaged in the labour market have traditionally been under-represented in these plans, and now concern needs to be shown for the young adults who are having well documented difficulties gaining access to good jobs. Moreover, the recent decline in interest rates will have a negative effect on investment income and it has been speculated that the post 1966 baby bust will reduce capital gains on principal residences.

Finally, in the face of even modest real wage growth, the price indexed OAS will decline over time. As has been noted for some years, the declining relative value of OAS benefits has important implications. It increases the incidence of low-income and inequality in the distribution of income (Murphy and Wolfson 1991, and Wolfson and Murphy 1997). At a more instrumental level, the declining value of OAS makes it more difficult for middle income Canadians to maintain their standard of living in retirement.

There is then a risk that the aging of the population will bring with it a growing portion of the population living on substandard incomes. This is not true simply for aging baby boomers, it is true for succeeding generations as well. Notwithstanding the need to address the retirement income needs of current and future generations of the elderly, Canadians have entered a debate about the affordability and sustainability of our relatively modest public pension arrangements that simply ignores retirement income needs. All generations, but especially future generations, tend to be treated as if they will always be payers of pension contributions and will never be retirees themselves.

Given the concern that has been expressed in recent years about the intergenerational unfairness of public pensions, it is interesting to reflect on three aspects of the situation of the current elderly. They would seem to be an impossible combination given the way in which concerns about unfairness are being expressed. First of all, the current elderly are the recipients of the biggest intergenerational transfers within the OAS and CPP/QPP. People born between 1911 and 1922 got to take advantage of full OAS and CPP/QPP benefits but paid little to support earlier generations through these programs. If we were to take our ethical cues from people who are expressing concern about the intergenerational fairness of OAS and CPP/QPP, we might characterize today's elderly as "rip off artists" or something to that effect. However, the second thing to remember about today's elderly is that they live on incomes that are somewhat substandard by prevailing norms. To put it somewhat differently, today's elderly do not seem to be making unreasonable claims on national income, even though they are the recipients of large net intergenerational transfers. Finally, it is striking that in so far as a particular generation is being singled out for disapproval in the discussion of intergenerational transfers, it is the baby boom and not today's elderly. The net intergenerational transfers to the baby boom will be much smaller than the transfers to the current cohort of elderly.

It is a matter of pure speculation as to why popular disapproval has not fallen on the current generation of older Canadians. No doubt part of it turns on the fact that it is difficult for working age people to focus resentment on their parents and grandparents. But the lack of resentment might also reflect the fact that today's elderly left a legacy to the working population that satisfies most of the conditions of an appropriate legacy that I've discussed. In other words, there may be an acceptance that the receipt of a large intergenerational transfer through the OAS and CPP/QPP is a rather trivial concern in light of the economic and social foundations that today's elderly put in place for successor generations.

By analogy, even if it was true that the intergenerational fairness of the CPP/QPP could be improved by the measures proposed by the federal government, it would hardly be a cause of celebration by today's younger generations if lower CPP/QPP contributions during their

working lives were part of a package that included poor employment prospects, a general decline in environmental and social conditions, and lower relative incomes in old age than those received by current retirees.

### 3. Conclusion

Being fair to older generations and to younger generations is a substantial challenge at any moment in time and through time. Moreover, the challenges are quite different thanks to the way that family relationships evolve through the life cycle and because of the obvious difference in the positions of older and younger generations in their life-cycles.

For older people, fairness revolves in substantial measure around tax and transfer issues. How can the retired population be provided with a reasonable share of national income without imposing an unreasonable burden on younger generations? To date it should be noted that younger Canadians have been spared the obligation to support older Canadians to a degree that would allow older Canadians to have incomes that are the norm in our society.

Being fair to the young involves a much wider range of considerations. Popular attention has been drawn to financial problems that are seen as being passed on from older to younger generations, namely the public debt and maturing pay-go pension plans. Yet the big question for today's young—like all young generations—is whether they will inherit the real economic capacity to provide good living standards for themselves while taking care of older generations and any negative legacies left by prior generations. An affirmative answer to this question requires strength in both private and public institutions. Presently, the rather narrow approach that is being taken to deficit and debt reduction is combining with the philosophy of market liberalization in a way that is jeopardizing the public sector presence that is necessary to future well being.

I've noted many shortcomings in data and analysis, but it is striking that so many of them relate to difficulties in capturing the contribution of the public sector to our social and economic life.

## Bibliography

CORAK, Miles (editor) (1998). *Government Finances and Generational Equity*. Ottawa: Statistics Canada Catalogue No. 68-513-XPB.

MURPHY, B. and M.C. WOLFSON (1991). "When the Baby Boom Grows Old: Impacts on Canada's Public Sector." *Statistical Journal of United Nations Economic Commission for Europe*. Vol. 8, No. 1, pp. 25-43.

WOLFSON, M.C. and B. MURPHY (1997). "Aging and Canada's Public Sector: Retrospect and Prospect." In K. Banting and R. Boadway (editors). *Reform of Retirement Income Policy: International and Canadian Perspectives*. Kingston: Queen's University, School of Policy Studies.





3. Conclusion

Se montrer équitables à la fois pour les vieilles générations et pour les jeunes représente un défi permanent. De plus, ce défi prend une forme différente grâce aux relations familiales qui ont évolué durant le cycle de vie et aussi en raison de la différence évidente qui existe entre les positions des générations plus vieilles et plus jeunes par rapport à leur cycle de vie respectif.

En ce qui concerne les gens âgés, l'équité tourne autour de mesures substantielles concernant les questions fiscales et de transfert. Comment peut-on assurer une part raisonnable du revenu national à la population des retraités sans imposer un fardeau déraisonnable aux jeunes générations? Jusqu'ici, on peut affirmer que les jeunes Canadiens se sont vu épargner l'obligation de soutenir les plus âgés dans une mesure qui permettrait à ces derniers de recevoir des revenus qui correspondent à la norme dans notre société.

D'un autre côté, se montrer juste envers la jeunesse peut sous-entendre un éventail plus large de considérations. L'attention populaire se porte sur les problèmes financiers qui semblent se transmettre d'une génération à la suivante, c'est-à-dire la dette publique et les régimes de pension à financement par répartition qui arrivent à échéance. Pourtant, la grande question qui se pose aujourd'hui aux jeunes—comme à toutes les jeunes générations—est celle-ci : hériteront-ils réellement de la capacité économique d'acquiescer un niveau de vie décent tout en subvenant aux besoins des personnes âgées et en assumant l'héritage parfois négatif laissé par les

prédécesseurs. Pour répondre par l'affirmative à cette question, il est nécessaire de se doter d'institutions privées et publiques vigoureuses. Présentement, l'approche assez étroite adoptée pour réduire le déficit et la dette vient s'ajouter à une philosophie de libéralisation du marché qui menace, d'une certaine manière, la présence du secteur public qui est nécessaire à notre bien-être futur.

J'ai noté de nombreuses lacunes dans les données et les analyses, mais il est frappant qu'un si grand nombre de celles-ci s'expliquent par la difficulté de saisir la contribution du secteur public à notre vie sociale et économique.

Bibliographie

CORAK, Miles (dir.) (1998). *Les finances publiques et l'équité intergénérationnelle*. Ottawa: Statistique Canada, n° 68-513-XPB au catalogue.

MURPHY, B. et M.C. WOLFSON (1991). « When the Baby Boom Grows Old : Impacts on Canada's Public Sector. » *Statistical Journal of United Nations Economic Commission for Europe*. Vol. 8, n° 1, p. 25-43.

WOLFSON, M.C. et B. MURPHY (1997). « Aging and Canada's Public Sector: Retrospect and Prospect. » Dans K. Banting et R. Boadway (dir.). *Reform of Retirement Income Policy: International and Canadian Perspectives*. Kingston: Queen's University, School of Policy Studies.

les personnes âgées d'aujourd'hui « d'artistes de l'arnaque » ou de quelque chose d'approchant. Toutefois, la deuxième chose à se rappeler concernant les personnes âgées d'aujourd'hui, est qu'elles vivent en fonction de revenus qui sont quelque peu inférieurs aux normes courantes. Autrement dit, les gens du troisième âge ne semblent pas imposer un fardeau déraisonnable au revenu national, même s'ils sont les bénéficiaires de transferts intergénérationnels nets importants. Et pour finir, il est frappant que jusqu'à maintenant, lorsqu'il s'est agi de singuliers une génération en particulier et de lui attribuer le mauvais rôle dans la discussion qui entoure les transferts intergénérationnels, c'est celle du baby-boom qui a écopé plutôt que celle des personnes âgées d'aujourd'hui. Les transferts intergénérationnels nets aux membres de la génération de l'explosion démographique seront beaucoup moins importants que ceux que reçoit actuellement la cohorte des personnes âgées.

On ne peut que s'interroger sur les raisons qui ont fait que la désapprobation populaire ne soit pas tombée sur la génération actuelle de Canadiens âgés. Sans doute que cela s'explique en partie par le fait qu'il est difficile pour les personnes en âge de travailler de concentrer leur ressentiment sur leurs parents et grands-parents. Mais l'absence de ressentiment pourrait aussi s'expliquer du fait que les personnes âgées d'aujourd'hui ont laissé un héritage à la population de travailleurs qui satisfait la plupart des critères d'un héritage tel que je l'ai défini. En d'autres mots, il se peut que l'on accepte que le paiement d'importants transferts intergénérationnels par l'entremise des prestations de la SV et du RPC/RRQ ne représente qu'une considération négligeable en regard des bases économiques et sociales que les personnes âgées ont mises en place pour le bénéfice des générations suivantes.

Par analogie, même s'il est vrai que l'équité entre les générations relativement au RPC/RRQ pourrait être améliorée par l'entremise des mesures proposées par le gouvernement fédéral, ce résultat pourrait difficilement être applaudi par les jeunes générations si des cotisations moins dres au RPC/RRQ durant leur vie de travailleurs se traduisaient plus tard par la perspective de possibilités d'emploi réduites, d'une dégradation générale des conditions sociales et de l'environnement et de revenus relativement plus bas à l'âge de la retraite que ceux que reçoivent actuellement les retraités.

Finalement, en présence d'une croissance même modeste de la rémunération réelle, les prestations de la sécurité de la vieillesse indées diminueront avec le temps. Comme nous l'avons déjà remarqué depuis quelques années, la diminution de la valeur relative des prestations de la SV a d'importantes répercussions. En effet, elle augmente l'incidence de la pauvreté et des inégalités dans la répartition du revenu (Murphy et Wolfson 1991, et Wolfson et Murphy 1997). À une échelle plus instrumentale, la diminution de la valeur des prestations de la SV contribue à rendre les choses plus difficiles encore pour les Canadiens à revenus moyens qui s'efforcent de maintenir leur niveau de vie à la retraite.

On envisage ensuite le risque qu'avec le vieillissement de la population, un plus grande proportion de la population devra vivre avec des revenus inférieurs aux normes. Cette situation ne concernera pas seulement les baby-boomers vieillissants, elle touchera aussi les générations suivantes. Les Canadiens ont amorcé un débat au sujet de l'abordabilité et de la viabilité de nos mesures relativement modestes relativement aux pensions de retraites publiques qui ne tiennent tout simplement pas compte des besoins en matière de revenu à la retraite des générations actuelles et futures de personnes âgées. Toutes les générations, en particulier les générations futures, ont tendance à être traitées comme si elles allaient toujours être des cotisants aux régimes de retraite et comme si elles n'allaient jamais en être les bénéficiaires elles-mêmes.

À la lumière des préoccupations qui ont été exprimées ces dernières années au sujet du manque d'équité des régimes de pension publics entre les générations, il est intéressant de réfléchir à trois aspects de la situation des personnes âgées d'aujourd'hui. Ces aspects semblent une combinaison irréconciliable étant donné la façon dont les préoccupations concernant le manque d'équité s'expriment. Tout d'abord, les personnes âgées aujourd'hui sont les bénéficiaires des plus importants transferts intergénérationnels de prestations de SV et de RPC/RRQ. Les personnes nées entre 1911 et 1922 ont pu profiter des prestations pleines et entières de la SV et du RPC/RRQ sans avoir eu à débourser beaucoup en retour pour le bénéfice des générations plus jeunes dans le cadre de ces régimes. Si nous devons recevoir des leçons en matière d'éthique de la part des personnes qui expriment leurs préoccupations concernant le manque d'équité des prestations de la SV et du RPC/RRQ, nous pourrions traiter



## 2. Équité concernant les dispositions relatives à la retraite

L'une des principales préoccupations soulevées en ce qui concerne la situation des jeunes d'aujourd'hui tient à ce qu'ils devront assumer un fardeau écrasant lorsque le moment sera venu d'assurer le financement par répartition des dispositions relatives à la retraite. En ce qui concerne cette question, il faut d'abord préciser deux points.

Premièrement, étant donné la pratique relativement récente mais désormais profondément enracinée de mise à la retraite, les représentants les plus âgés de la population ne tirent plus le gros de leurs revenus de l'emploi, et on ne s'attend pas non plus à ce qu'ils le fassent. La question centrale qui se pose est la suivante : comment faire en sorte que ces retraités en nombre croissant obtiennent des revenus raisonnables, d'après les normes actuelles, sans imposer pour autant un fardeau intolérable aux jeunes générations. Contrairement à la situation des jeunes avant qu'ils entrent sur le marché du travail, les revenus et les soins à donner aux personnes âgées sont fournis principalement à l'extérieur du cadre des transactions intrafamiliales.

Deuxièmement, étant donné que le problème du coût des programmes de revenus de retraite a été, dans une large mesure, attribué au vieillissement de la génération du baby-boom, il importe de préciser qu'un processus de vieillissement de la société beaucoup plus profond est amorcé. En réalité, c'est l'effondrement de la natalité qui a suivi 1966, plutôt que l'explosion démographique, qui est le principal responsable de ce changement. Par conséquent, les coûts de financement par répartition des pensions de retraite au Canada seront pratiquement inchangés une fois que les membres de la génération du baby-boom auront franchi l'étape de la retraite. En réalité, les membres de la génération du baby-boom et ceux de la Génération X ont en commun de payer davantage pour leurs prestations de retraite du RPC/RRQ que ceux de la même génération. Les baby-boomers et les membres de la Génération X ont plus en commun, en ce qui a trait à l'équilibre entre les cotisations et les prestations, qu'avec la génération qui les précède ou qui les suit.

Dans l'examen du vieillissement de la population, il importe de garder à l'esprit la situation actuelle des personnes âgées en ce qui concerne les revenus, et les perspectives qui

s'annoncent à cet égard pour les futures personnes âgées si les mesures actuelles ne sont pas modifiées.

À cet égard, nous avons des points positifs à signaler. L'incidence du faible revenu continue de diminuer même si elle demeure encore trop élevée, en particulier pour les gens du troisième âge qui vivent seuls, et qui sont pour la plupart des femmes. De plus, il semble que pour beaucoup, la transition initiale entre le marché du travail et la retraite s'opère assez confortablement. Une transition confortable semble associée à des années à titre de cotisant dans un « bon » fonds de retraite d'entreprise. Mais, il y en a beaucoup aussi qui vivent cette transition plus difficilement : les revenus semblent diminuer durant les années de retraite par comparaison avec ceux de la population en général, et le passage entre la situation de membre d'un couple à celle de seul survivant contribue aussi à faire baisser le niveau de vie. Il convient de noter que le gros des renseignements dont nous disposons à ce sujet provient d'inférences, étant donné l'absence de données longitudinales appropriées.

Il y a plus de raisons d'être pessimiste qu'optimiste lorsque l'on considère les revenus que les mesures existantes risquent de générer pour les futurs retraités. Encore une fois, il y a cependant des aspects positifs : davantage de femmes âgées retireront leurs propres prestations de retraite du RPC/RRQ et cela contribuera à réduire l'incidence des faibles revenus. Mais, étant donné que la participation des femmes aux régimes de retraite en milieu de travail est relativement peu élevée, il se peut que l'on n'assiste pas à l'amélioration correspondante du degré avec lequel les femmes retraitées maintiennent leur niveau de vie après la retraite. De plus, le marché du travail subit des transformations qui réduisent la probabilité que les personnes participant à des régimes de retraite en milieu de travail aient accès à de bons emplois. De plus, la récente baisse dans les taux d'intérêt aura une incidence négative sur les revenus d'investissement et on a déjà échafaudé des hypothèses sur le fait que les membres de la génération qui suit l'effondrement de la natalité de 1966 obtiendront des gains en capital réduits sur les résidences principales.

Il est question dans ce chapitre de l'amélioration globale des niveaux de scolarité et d'alphabétisme. Par contre, il y est aussi question de la difficulté de combler l'écart nous séparant de la réussite d'une génération à la suivante à moins d'être très bien nanti.

Finalement, on trouve très peu d'éléments dans les chapitres du présent volume ou dans celui de Corak (1998) portant sur la protection du milieu naturel.

Deux derniers points valent la peine d'être soulignés. Premièrement, il devrait être clair que l'héritage dont les jeunes générations ont besoin peut être compris, au sens large, par les mesures économiques traditionnelles du milieu-être. Mais cet héritage comporte aussi des dimensions qui ne sont pas entièrement comprises de cette manière. Ceci devient encore plus évident lorsqu'on envisage le bien-être sur le plan de l'environnement. Des considérations relatives à l'exclusion sociale et à la sécurité, de même qu'à l'acquisition des connaissances comme étant un bien intrinsèque, suggèrent aussi que l'on a besoin de mesures additionnelles du bien-être. Les discussions autour de la définition du bien-être et des moyens de le mesurer doivent être les bienvenues et encouragées. Deuxièmement, il est important de reconnaître que la progression concernant toutes les dimensions de l'héritage a fait appel à des initiatives publiques et privées au cours des dernières décennies. Le secteur public a été directement à l'origine de la création de nombreuses possibilités d'emplois durant la période qui a suivi la Deuxième Guerre mondiale. Ce secteur a été une source particulièrement importante de bons débouchés, en particulier pour les femmes. Les institutions publiques et les institutions privées à capitaux publics réunies ont joué un rôle important dans l'acquisition des aptitudes et des connaissances. Jusqu'à ce jour, les efforts en ce qui concerne la protection de l'environnement ont porté principalement sur une combinaison de mesures réglementaires, fiscales et de réduction des dépenses du gouvernement. Les impôts et taxes, les transferts et la réglementation du marché du travail ont contribué à la préservation de la paix sociale en limitant les disparités.

Jusqu'à un certain point, c'est faire un truisme que de souligner que les initiatives publiques ont joué un rôle important en contribuant à l'héritage reçu par les jeunes générations. Mais, actuellement l'esprit de libéralisation du marché qui prévaut risque de complètement annihiler ce rôle.

Les jeunes générations devraient s'attendre à hériter de ce qui suit :

- [1] un stock de capital public et privé en quantité et en qualité suffisantes pour offrir de bonnes possibilités d'emploi à quiconque est désireux de travailler et en mesure de le faire;
- [2] des connaissances et des aptitudes qui permettent d'obtenir un emploi productif dans les technologies les plus avancées, la capacité d'inventer et la participation à la vie sociale et politique de la collectivité;
- [3] un milieu naturel qui soutient à la fois la production économique et les activités récréatives; et
- [4] la paix sociale, à la fois comme fin en soi et comme mesure d'appui pour jouir du bien-être matériel et pour faciliter sa production.

Ces conditions n'ont pas émergé à titre d'objets explicites de discussion dans la plupart des chapitres, mais de façon implicite, la majorité d'entre eux sont abordés.

D'une manière générale, la recherche qui porte sur la situation des jeunes adultes sur le marché du travail—principalement les chapitres 2, 3 et 10 mais aussi les chapitres 4 et 5—peut être envisagée comme un commentaire sur la quantité et la qualité du stock de capital. Il est toutefois frappant qu'aucun des chapitres ne porte directement sur le stock de capital actuel ou futur. De plus, il existe un lien entre les questions traitées dans le cadre de ces communications et les conditions requises pour obtenir la paix sociale. Les inégalités entre les générations et les disparités ponctuelles qui sont documentées peuvent facilement être interprétées comme des facteurs pouvant éventuellement nuire à la paix sociale. Les quelques chapitres qui viennent étayer la transmission de l'inégalité sur le plan socio-économique de même que les autres comportements et caractéristiques sociaux (chapitres 4 à 9), ajoutent une dimension importante à notre compréhension de la transmission de l'inégalité avec le temps. La perpétuation de l'exclusion sociale et économique d'une génération à la suivante risque de miner la position que les exclus adopteront en ce qui concerne le maintien d'une société stable.

Le chapitre rédigé par de Broucker et Lavallée (chapitre 8) parle directement d'équité per les jeunes Canadiens avec les connaissances et les aptitudes nécessaires pour affronter le marché du travail et la société au sens large.



# Équité intergénérationnelle : les objectifs de la politique

BOB BALDWIN

Millennium. » Dans *Towards the XXI Century: Emerging Socio-Demographic Trends and Issues in Canada*. Ottawa : Fédération canadienne de démographes.

MURPHY, Brian (1998). « L'incidence de l'évolution du système d'imposition et de transferts sur la répartition des impôts nets sur la vie du contribuable: de 1984 à 1995. » Dans Milies Corak (dir.). *Les finances publiques et l'équité intergénérationnelle*. Ottawa : Statistique Canada, n° 68-513-XPB au catalogue.

PHILLIPSON, Chris (1996). « Intergenerational Conflict and the Welfare State: American and British Perspectives. » Dans Alan Walker (dir.).

## 1. L'équité pour les générations futures

Les chapitres du présent livre de même que le volume qui l'accompagne (Corak 1998) ont vu s'exprimer passablement de préoccupations concernant la situation actuelle des jeunes adultes et des enfants au Canada. En ce qui concerne les jeunes adultes, la difficulté de se trouver un emploi bien rémunéré et d'atteindre un niveau de vie raisonnable fait l'objet de bon nombre des chapitres susmentionnés. En fait, comme l'illustre Morrisette au chapitre 3, la courbe des revenus des jeunes adultes est beaucoup plus faible, par comparaison avec celle des cohortes plus âgées, que la courbe que l'on pouvait observer habituellement dans le passé. La situation des enfants et l'augmentation de la pauvreté infantile sont souvent traitées comme un problème ponctuel. Pourtant, ce problème est de toute évidence lié à la situation des jeunes adultes. Par ailleurs, un certain nombre de chapitres jettent un éclairage intéressant sur la transmission entre générations du statut social et économique que tout autant que de la diversité des caractéristiques comportementales. Malgré l'éventail des préoccupations concernant le statut des enfants, l'équité horizontale n'est pas présentée comme un problème. Les préoccupations concernant les

jeunes générations sont aussi axées sur leur aptitude à répondre aux besoins financiers d'une population vieillissante et à assumer une dette publique accumulée imposante.

Afin de prendre du recul par rapport aux questions qui ont été abordées ou non par les auteurs, je propose de soulever les principaux éléments constituant l'héritage que les jeunes générations devraient espérer recevoir de leurs prédécesseurs. À la lumière des commentaires que je compte faire plus loin concernant les gens du troisième âge, j'aimerais insister sur le fait que les aspects les plus importants du cycle de vie en cours sont les suivants : les enfants vivent avec un parent ou des parents et acquièrent de l'éducation et des aptitudes jusqu'à la fin de l'adolescence ou le début de l'âge adulte lorsqu'ils font leur entrée sur le marché du travail et fondent leur propre ménage plus ou moins à la même époque. (Les travaux présentés au chapitre 10 suggèrent que ce processus n'est en fait pas si immuable que je semble le suggérer.) Le niveau de vie immédiat dans l'enfance est déterminé principalement par les transferts en provenance des revenus gagnés par les parents, même si les auteurs du chapitre 2 attirent l'attention sur le rôle de plus en plus prédominant des transferts publics au sein des familles à faible revenu dans un passé récent.

*The New Generational Contract: Inter-generational Relations, Old Age, and Welfare*. London: University College London.

WALKER, Alan (1996). « Introduction: The New Generational Contract. » Dans Alan Walker (dir.). *The New Generational Contract: Inter-generational Relations, Old Age, and Welfare*. London: University College London.

WOLFSON, M.C., G. ROWE, X. LIN, et S.F. GRIBBLE (1998). « Comptabilité générationnelle chronologique dans le cas de populations hétérogènes. » Dans Milies Corak (dir.). *Les finances publiques et l'équité intergénérationnelles*. Ottawa : Statistique Canada n° 68-513-XPB au catalogue.



nouveau) s'accompagne toujours... d'une vision fraîche de l'assimilation, de l'utilisation et du développement du matériel offert... dans le cas des générations, le « contact neut » avec l'héritage social et culturel est déterminé non pas par le simple changement à l'échelle sociale... il facilite la réévaluation de notre bagage et nous enseigne à la fois à oublier ce qui ne nous est plus utile et à rechercher ce qu'il nous reste à acquérir.

Les germes de l'innovation se trouvent dans la transmission entre les générations. Les transferts intergénérationnels ont en effet une autre dimension que les simples ratios de dépendance et solides de décaissements.

### Bibliographie

CHEAL, David (1987). « Intergenerational Transfers and Life Course Management: Towards a Socio-Economic Perspective. » Dans A. Bryman, P. Allott et T. Keill (dir.). *Rethinking the Life Cycle*. London: MacMillan.

CORAK, Miles (dir.) (1998). *Les finances publiques et l'équité intergénérationnelle*. Ottawa: Statistique Canada, n° 68-513-XPB au catalogue.

GUNDERSON, Morley et Douglas HYATT (1998). « Le passif non capitalisé du régime d'indemnisation des accidents du travail: aspects intergénérationnels. » Dans Miles Corak (dir.). *Les finances publiques et l'équité intergénérationnelle*. Ottawa : Statistique Canada, n° 68-513-XPB au catalogue.

HICKS, Chantal (1998). « Le système canadien d'imposition et de transferts – La répartition par groupes d'âge ». Dans Miles Corak (dir.). *Les finances publiques et l'équité intergénérationnelle*. Ottawa: Statistique Canada, n° 68-513-XPB au catalogue.

MANNHEIM, K. (1952). « The Problem of Generations. » Dans *Essays on the Sociology of Knowledge*. London: Routledge et Kegan Paul.

McDANIEL, Susan A. (1997). « Intergenerational Transfers, Social Solidarity, and Social Policy: Unanswered Questions and Policy Challenges. » *Canadian Public Policy/ Canadian Journal of Aging*, Joint Issue, Vol. 23, p. 1-21.

McDANIEL, Susan A. (1996). « Serial Employment and Skinny Government: Reforming Caring and Sharing in Canada at the

### 3. Divers modèles de transferts et de politiques intergénérationnels

Trois modèles différents de transferts intergénérationnels accompagnés des hypothèses de base qui les définissent sont présentés au tableau 11.1. Ce ne sont pas les hypothèses relatives à chaque modèle qui sont contestées, mais plutôt les options politiques qui semblent indiquer chacune d'elles. Au bout du compte, les récents budgets fédéral et des provinces sont des options. Ces budgets doivent en effet jongler de quelque façon avec les considérations relatives au déficit et les questions de niveau de vie et de qualité de vie (principalement pour les personnes âgées, mais aussi pour les enfants vulnérables).

Pour chacun de ces modèles, la génération fait référence à quelque chose de différent, tout comme les liens et les responsabilités entre générations. Dans le modèle économique, la génération est habituellement synonyme de groupe d'âge, et parfois de grands groupes (par exemple, 65 ans et plus ou plus de 18 ans) ou même d'années d'âge individuelles. Il s'agit d'un point de vue comptable, qui rappelle les préoccupations de Mannheim en ce qui concerne la définition de la génération plutôt que le relief social des réseaux de responsabilités et de droits qui relient les personnes entre elles dans la société (McDaniel 1996). Avec le modèle sociologique, l'aspect relationnel de la génération est présent, mais aucune définition claire n'est largement utilisée. Dans le modèle de politique sociale, le sens véhiculé est celui des normes et des obligations morales des générations, les unes à l'égard des autres, les obligations étant accentuées par les politiques du gouvernement. Dans les trois modèles, le concept démographique de la génération qui est défini comme la période de temps nécessaire pour qu'une progéniture atteigne l'étape de la reproduction, n'est pas celui qui est utilisé.

Mannheim (1952, 293-94) attire l'attention sur un aspect des transferts intergénérationnels qui est significatif pour les politiques, mais du moins absent de la base de connaissances au Canada. Il s'agit de la transmission des idées, des attitudes ancrées, des progrès. Voici ce qu'il affirme à cet égard :

...notre culture est développée par des individus qui entrent une nouvelle fois en contact avec l'héritage accumulé... un contact neut (associé à quelque chose de

impôts et taxes nets dans les cohortes de préretraités et de retraités (Hicks 1998, Murphy 1998). On peut s'interroger sur la mesure dans laquelle la polarisation est la voie à suivre au Canada et à quel point les analyses suivant les lignes générationnelles sont utiles. Les analyses suivant cette dimension peuvent se révéler importantes pour établir un contexte de politique, mais elles peuvent aussi en dernier ressort créer une diversion par rapport aux vrais besoins au sein de chaque génération ou groupe.

Trois facteurs sont révélateurs de l'émergence de nouveaux contrats sociaux entre les générations, contrats qui peuvent de manière paradoxale dériver de la polarisation socio-économique et entre les générations. Premièrement, le concept de génération est d'abord et avant tout d'ordre familial, ce qui signifie que les transferts au sein des familles, qu'ils soient économiques (mobilité et biens) ou sociaux (santé, bien-être, capital intellectuel) rendent les scénarios de polarisation entre générations moins convaincants. La compréhension de la nature et du degré de mobilité entre générations de même que des mécanismes sous-jacents est d'une importance capitale. C'est pourquoi les conclusions des chapitres 4 et 5 sont importantes. La polarisation entre les générations actuelles pourrait s'accompagner d'une polarisation exagérément prononcée par rapport à la génération suivante, étant donné que les revenus, la richesse et le capital social sont transférés au sein des familles. Au chapitre 4, les conclusions de Fortin et Lefebvre selon lesquelles c'est au sommet et à la base de la distribution des revenus que l'immobilité est la plus marquée tendent à appuyer cette possibilité. Corak et Heisz, au chapitre 5, apportent d'autres exemples à l'appui en affirmant que la configuration résidentielle de la situation socio-économique de même que la nature des revenus des parents ont une incidence sur la mobilité. Tous les travaux cités dans les chapitres 6 à 9 contribuent à préciser les caractéristiques des mécanismes sous-jacents possibles. Les familles sont au centre du processus puisque ce sont elles qui réalisent les transferts entre générations, comblant d'une certaine manière la perte de transferts publics en effectuant une mise en commun des ressources, et d'une manière différente, contribuant à accentuer la polarisation entre les Canadiens à l'aise et ceux qui sont pauvres.

Le deuxième facteur suggérant l'émergence d'un nouveau contrat social entre générations tient au fait que la génération en soi est un

indicateur de moins en moins approprié de la dépendance réelle, sociale ou économique, alors que les catégories de dépendance ont tendance à devenir plus floues et à correspondre de moins en moins avec les étapes de l'existence. Les étiquettes « travailleur », « retraité » et « enfant » sont de moins en moins précises à une époque où les travailleurs n'ont pas de travail ou sont insécures et travaillent de façon moins continue, où les retraités ont moins facilement accès à leur pension de retraite, mais sont néanmoins mis à la retraite purement et simplement, et où les enfants travaillent de plus en plus à temps partiel afin d'aider des familles dont l'insécurité va en grandissant. Les travaux mentionnés au chapitre 10 soulignent certains de ces points, mais Mannheim (1952, p. 311) énonce très clairement cette question :

Si nous parlons simplement de « générations » sans effectuer d'autre différenciation, nous risquons de mélanger un phénomène purement biologique avec d'autres qui sont le produit de forces sociales et culturelles : ainsi, nous obtenons une sorte de sociologie des tableaux chronologiques qui utilise une vue d'ensemble pour « découvrir » des mouvements de génération fictifs qui correspondent aux points tournants critiques de la chronologie historique.

Troisièmement, un nouveau contrat social est peut-être en train d'émerger parce que le concept des transferts publics entre générations devrait être élargi afin d'inclure les politiques en milieu de travail (McDaniel 1997, Gunderson et Hyatt 1998). L'exemple que j'utilise est celui de l'effet de transfert intergénérationnel des politiques d'ancienneté qui éventuellement creusent l'écart entre le profil de la productivité et celui de la rémunération, donnant lieu à un transfert non intentionnel entre les jeunes travailleurs et les travailleurs plus âgés. Le fait que les politiques d'ancienneté ne soient pas aussi vigoureuses durant la période récente de restructuring au Canada peut avoir des incidences qui n'ont pas encore été mesurées en ce qui a trait aux transferts intergénérationnels, et pourrait aussi se révéler l'indication d'une nouvelle avenue selon laquelle un nouveau contrat social entre générations est en cours d'élaboration. Les responsabilités de l'élaboration des politiques tireraient certainement profit d'une plus grande abondance de données et de recherches sur ces aspects subtils et « secrets » des relations intergénérationnelles.



## 2. Sommes-nous en train d'assister à l'émergence d'un nouveau contrat social entre les générations ?

Walker (1962, 1-2) affirme que « ...les sociétés industrielles se trouvent à une nouvelle croisée des chemins en ce qui concerne les générations ». Il s'empresse d'ajouter qu'il n'y a rien là de bien nouveau dans les sociétés modernes : « En Grande-Bretagne, nous disposons de témoignages qui remontent au XVI<sup>e</sup> siècle selon lesquels dans les temps difficiles, les villageois ostracisaient parfois les personnes âgées et leur reprochaient d'être un fardeau pour la collectivité. » (p. 24) Donc, l'origine des conflits entre les groupes d'âge au sein de la société précède les débats que nous avons aujourd'hui en ce qui concerne l'équité intergénérationnelle de 400 ans! Cheal (1987) apporte de l'eau au moulin en indiquant qu'il n'y a rien d'innexorable dans le déroulement de l'existence et dans les « flux d'aide nets ». En fait, en s'appuyant sur l'Enquête sur les dépenses des familles de 1978, il montre que le flux qui prédomine est celui qui circule entre les groupes d'âge plus vieux et les plus jeunes, contrairement aux prévisions, à la théorie dominante et aux présomptions des modèles les plus courants de transferts intergénérationnels.

Les mutations économiques et la redistribution de l'État providence ont nécessité la redéfinition d'un nouveau contrat social entre les générations, dont les contours se précisent lentement. J'élabore une typologie du nouveau contrat social dans McDaniel (1997), et j'en arrive à la conclusion que les changements insurrectionnels apportés aux régimes de pension, aux soins de santé, à l'aide sociale, aux programmes d'aide à la vie autonome ainsi qu'aux pensions alimentaires pour enfants entraînent tous des remaniements dans le contrat social public et privé entre les générations.

L'accentuation de la polarisation de la situation des jeunes par opposition à celle des gens plus âgés, et celle des pauvres par opposition à celle des riches est désormais bien documentée : plus forte dépendance des jeunes adultes résultant de revenus insuffisants et d'un accès restreint aux emplois (chapitres 2 et 10), polarisation des possibilités dans le domaine de l'éducation (chapitre 8), des répercussions sur la santé (chapitre 9), de l'emploi, des gains, des transferts sociaux et des caractéristiques familiales (chapitre 2), de même que des transferts et des

à plus long terme. Nous pourrions y arriver en partie à l'aide de simulations, certaines établies à partir de données longitudinales comme celles de l'Enquête sur la dynamique du travail et du revenu (EDTR), et grâce à la comptabilité transgénérationnelle. On trouvera des exemples à cet effet dans Corak (1998).

[6] Le dynamisme des relations intergénérationnelles n'est pas entièrement saisi à l'aide des données existantes. La réciprocity, les interrelations, les interdépendances et les échanges ne sont que partiellement connus, et certains pour la première fois. À l'aide de l'EDTR et d'autres données tirées d'études longitudinales, cette question pourra être réglée en partie.

[7] La transmission du « capital social », d'ordre public ou privé, n'est pas bien perçue par le système statistique existant même si, de toute évidence, certains aspects importants des avantages et des désavantages relatifs, de même que de la transmission des valeurs sociales et familiales ont été bien évalués par les auteurs des chapitres 4 à 8.

[8] Il existe des lacunes dans la mesure du transfert des risques entre les générations. Il semble que l'on se concentre souvent sur le transfert des biens, des revenus ainsi que des taxes ou des transferts. Cette mesure est pourtant d'une importance vitale en ce qui concerne la valeur que les Canadiens accordent au travail accompli et aux sacrifices consentis pour le bien de leurs enfants, même si les risques que ces efforts comportent pour la santé et le bien-être des parents peuvent être assez importants pour menacer à leur tour la santé et le bien-être des enfants.

[9] À mon sens, une question vitale en matière de politique—sur laquelle j'insiste dans McDaniel (1997)—n'est toujours pas résolue, il s'agit de la mesure dans laquelle les transferts privés entre les générations peuvent se substituer aux transferts publics en régression. On ne sait pratiquement rien à ce sujet.

[10] Il est nécessaire de recueillir plus de données en ce qui a trait aux transferts intergénérationnels y compris les legs, mais aussi les dons en nature et l'aide de nature diverse.



Tableau 11.1  
Trois modèles de transferts intergénérationnels :  
Hypothèses de base et définitions

1. Économique	
Préoccupation dominante	• Problèmes liés aux transferts de ressources entre générations
Concepts prédominants	• Équité • Équité individuelle et horizontale en fonction du groupe d'âge • Mesures d'encouragement au travail et à l'épargne • Limiter le fardeau fiscal • Freiner les dépenses dans les programmes sociaux • Accroître le bassin de main-d'œuvre
2. Sociologique	
Préoccupation dominante	• Transformer les relations entre générations dans une société vieillissante
Concepts prédominants	• Pouvoir • Statut social • Sécurité et insécurité
Questions de politique	• Statut des personnes âgées et leur intégration sociale
3. Politique sociale	
Préoccupation dominante	• Bien-être des personnes âgées et qualité du niveau de vie de toutes les générations
Concepts prédominants	• Interdépendance entre les générations
Questions de politique	• Mesures visant l'amélioration du niveau de vie pour les personnes âgées d'aujourd'hui

[3] L'accompagnement (Corak, 1998) constitue un exemple admirable. À l'avenir, les recherches devraient tenir compte du fait que les relations intergénérationnelles se situent dans un contexte socio-économique qui sous-entend des transferts publics et privés, des échanges et des attentes. Les dimensions sociale et économique de ces relations ne sont pas complètement indépendantes, bien que les hypothèses qui les gouvernent soient très différentes. (Se reporter au tableau 11.1.)

[4] La nécessité de s'appuyer sur moins d'hypothèses concernant les membres des générations, dont on suppose souvent qu'ils sont en tous points pareils. Wolfson et coll. (1998), par exemple, reconnaissent qu'il faut faire la distinction entre les individus non seulement en fonction de l'âge, mais aussi du sexe et du revenu.

[5] De même, les analystes devraient s'efforcer d'adopter une vision réelle et exacte des membres de tout âge d'une même famille, qui partagent des ressources et éprouvent des sentiments les uns pour les autres. L'image du conflit des générations, où en-tants et personnes âgées évoquent une bande de garnements laissés à eux-mêmes et des personnes du troisième âge déconnectées de leurs familles est peu vraisemblable. Il nous faut disposer de davantage de recherches et de données concernant le partage des ressources au sein des familles, à la fois sur le plan social et économique, pour être en mesure d'élaborer des options politiques viables. Nous devons développer une vision globale de l'ampleur des flux entre générations, non seulement entre les plus âgés et les jeunes d'aujourd'hui, mais aussi des flux historiques

# Équité intergénérationnelle : les répercussions des politiques et des données

SUSAN A. MCDANIEL

La génération est la nouvelle astrologie du millé-

naire, avec ses étiquettes de baby-boomers,

baby-busters, membres de la Génération X et les

retraités, qui viennent remplacer les signes as-

trologiques pour nous définir à titre individuel et

pour nous guider collectivement à travers les

dédales du futur. Dans le cadre du présent do-

cument, j'examine trois questions : [1] L'état ac-

tuel des connaissances au sujet des transferts

intergénérationnels, à la fois publics et privés,

est-il suffisant pour nous permettre d'effectuer

des choix politiques éclairés ? Quels éléments

nous manquent-ils ? De quoi avons-nous besoin,

en particulier au sein du système canadien de

statistiques ? [2] En face d'une population vieillis-

sante, d'un marché du travail en pleine mutation

et de transferts sociaux qui diminuent comme une

peau de chagrin, sommes-nous les témoins de

'émergence d'un nouveau contrat social entre

les générations ? [3] Quel rôle jouent les divers

modèles de transferts intergénérationnels et,

naturellement, quel rôle joue la génération en tant

que concept démographique dans la définition

du champ des options politiques qui s'offrent aux

Canadiens à la fin des années 1990 ? Pour ré-

pondre à ces questions, je m'appuie sur les ana-

lyses et le cadre de travail présentés dans

Les résultats des recherches qui sont résumées

dans les chapitres du présent livre contribuent

certainement à améliorer la compréhension de

la dynamique intergénérationnelle, mais ils signa-

lent aussi d'importantes lacunes dans les con-

naissances et les données. Quelles leçons

183

devons-nous en tirer ? De quoi d'autre avons-

nous besoin ? Mes lectures me suggèrent au

moins dix points.

[1] La précision sur le plan conceptuel et

théorique. Les options politiques doivent

être mises en contexte et nécessitent une

remise en question critique des concepts de

la recherche. Ainsi, l'équité inter-

générationnelle, en tant que concept, a fait

l'objet de critiques soutenues que Phillips

(1996) et Walker (1996) ont résumées, et

« [...] l'équité intergénérationnelle] a été

déclarée impropre à servir de base à la

conceptualisation de la relation entre les

cohortes d'âge ou pour l'élaboration de

politiques. » (Walker 1996, p. 23). Dans ce

contexte, l'impropriété tient à trois critiques

fondamentales : [i] le véritable enjeu, dans

le cadre de nombreuses discussions

politiques, ce sont les répercussions sur le

plan financier d'une population vieillissante,

et non l'équité entre les générations; [ii] le

concept est davantage une utilisation oppor-

tune sur le plan politique du changement

démographique qu'une réalité empirique; et

[iii] se référant à des personnes comme si

elles étaient les représentantes d'une

certaine génération, on leur attribue des

caractéristiques qu'elles ne possèdent pas

nécessairement socialement ou économi-

quement. Cet élément a été souligné avec

éloquence par Karl Mannheim dans l'essai

devenu un classique du genre qu'il a publié

en 1952 et qui portait sur le problème des

générations ("The Problem of Generations").

Pour le paraphraser, ce n'est pas parce que

l'on est du même âge que l'on appartient à

la même génération.

[2] Davantage de collaboration interdis-ci-

plinnaire. Les essais publiés dans le présent

livre réunis avec ceux de l'ouvrage qui





## Note

Nous tenons à remercier Garnett Picot et Ted Wannell qui ont accepté de nous faire leurs précieux commentaires sur les ébauches du présent document. Nous remercions également Statistique Canada qui a mis les données à notre disposition de même que les organisateurs de la conférence sur l'équité entre les générations qui nous ont fourni l'occasion d'exposer nos idées.

Même en l'absence de données longitudinales appropriées, nous serons à même, dans une certaine mesure, de faire la distinction entre les effets dus à l'âge et les effets de cohorte : étant donné que nous comparons la distribution dans les modes de vie de personnes qui atteignent le même âge à divers moments dans le temps, nous contrôlons le premier effet et isolons le deuxième. Faute d'une meilleure solution, nous faisons l'hypothèse habituelle (mais contestable) que les différences entre deux points dans le temps et entre le profil des différences des groupes d'âge révélera à quel point les jeunes ont changé, durant la période, après la façon dont ils atteignent l'âge adulte. Il semble, d'une certaine manière, qu'il s'agisse d'une hypothèse raisonnable étant donné que nous prenons en considération l'ensemble de la population durant toute la période, dans une plage d'âge au sein de laquelle il n'y a pas beau-coup de décès ni de départ pour l'étranger. Autrement dit, l'autosélection à l'extérieur de notre champ d'observation durant la période visée est minime, et nous pouvons parfaitement examiner la redistribution des jeunes au fur et à mesure qu'ils vieillissent.

## Bibliographie

BOURDIEU, Pierre (1980). « La jeunesse n'est qu'un mot. » *Questions de sociologie*. Paris : Editions de Minuit.

BOYD, Monica et Edward T. PRYOR (1989). « The Cluttered Nest : The Living Arrangements of Young Canadian Adults. » *Canadian Journal of Sociology*. Vol. 15, 462-279.

BOYD, Monica et Doug NORRIS (1994). « The Cluttered Nest Revisited : Young Canadian Adults at Home in the 1990s. » Center for the Study of Population, Florida State University. Non publié.

GALLAND, Olivier (1993). *Les jeunes*. Paris : La Découverte, Coll Repères, nouvelle édition.

GALLAND, Olivier (1985). « Formes et transformations de l'entrée dans la vie adulte. » *Sociologie du travail*. Vol. 17, 33-52.

GAUTHIER, Madeleine (1994). *Une société sans les jeunes ?* Québec : Institut québécois de recherche sur la culture.

GOLDSCHIEDER, Frances et Calvin GOLDSCHIEDER (1994). « Composition familiale, soutien parental et départ du foyer des jeunes Américains au XX<sup>e</sup> siècle. » *Cahiers québécois de démographie*. Vol. 23.

IRWIN, Sarah (1995). *Rites of passage*. London : Sage.

MORISSETTE, René, John MYLES et Garnett PICOT (1993). « L'inégalité des gains au Canada : Le point sur la situation ? » *Statistique Canada*, Direction des études analytiques, document de recherche n° 60.

MYLES, John (1995). « After the Golden Age : Labour Market Polarization and Canadian Public Policy. » *Fédération canadienne des sciences sociales*, « Petits déjeuners sur la Colline », séries de séminaires, Parlement du Canada, 5 octobre, 13p.

PICARD, François (1992). *La génération lyrique : essai sur la vie et l'oeuvre des premiers-nés du baby-boom*. Montréal : Boreál.

RIDDELL, Craig (1995). « Human Capital Formation in Canada. » Dans Keith Banting et Charles Beach (dir.), *Labour Market Polarization and Social Policy Reform*. Kingston Ontario : School of Policy Studies, Queens University.

WHITE, Lynn (1994). « Coreidence and Leaving Home : Young Adults and their Parents. » *Annual Review of Sociology*. Vol. 20, 81-102.

Combinaison des catégories de la cohabitation, des études et de l'emploi

Tableau 10.A1

Relations de la cohabitation									
Relations par rapport aux études		Relations par rapport à l'emploi		Avec parents		En couple	Seul ou avec colocataires	Mono-parentales	Autres types de solidarité familiale
Relations	par rapport aux études	Relations par rapport à l'emploi	Type	Taille	Type	Taille	Type	Taille	Type
Études à plein temps	Inactif	Chômage durant une période limitée	2	28	6	63	11	4	16
			132	11	6	13	11	0	16
			1 209	2	32	59	11	0	16
			923	2	28	40	11	4	16
			36	2	13	6	11	0	16
			51	2	21	5	11	0	16
			45	1	54	9	11	4	16
			23	2	13	6	10	0	16
			25	2	13	6	1	2	16
			49	3	20	8	9	0	16
Études à temps partiel	Inactif	Chômage durant une période limitée	18	3	32	8	14	1	16
			83	3	77	8	40	3	16
			92	4	206	9	115	8	16
			899	5	3539	10	166	14	15
			539	5	615	7	188	14	15
			671	5	528	7	161	14	15
			254	3	442	8	86	12	16
			153	3	680	8	55	12	16
			1 583	3	2 280	8	1 065	12	16
			2 120	4	7 511	9	2 132	13	16
Pas aux études	Inactif	Chômage durant une période limitée	17	34	17	17	34	16	334
			17	17	17	17	17	17	17
			17	17	17	17	17	17	17
			17	17	17	17	17	17	17
			17	17	17	17	17	17	17
			17	17	17	17	17	17	17
			17	17	17	17	17	17	17
			17	17	17	17	17	17	17
			17	17	17	17	17	17	17
			17	17	17	17	17	17	17

prévues. En prenant le ratio de ces risques relatifs (observés par rapport à prévus), nous obtenons pour chaque type un chiffre unique qui nous indique l'ampleur du changement observé en proportion par rapport à l'égalité avec le changement prévu en proportion (un ratio des risques relatifs égal à un). Toute valeur supérieure à un nous informe qu'au cours de la période visée, ce type de mode de vie est devenu

plus fréquent que l'on s'y attendait d'après les changements survenus dans les distributions des trois variables sous-jacentes; un ratio inférieur à un nous révèle que le changement dans la fréquence observée de ce type n'a pas suivi l'évolution que nous avions prévue d'après les changements dans les distributions des variables sous-jacentes.

36 499 jeunes faisant partie de l'échantillon de 1981 appartenant à un nombre limité de catégories, puisque environ 60 % de tous les cas se retrouvent dans 6 de ces catégories et qu'un autre 28 % se retrouve les 12 plus grandes catégories suivantes. Une réduction de cette typologie est par conséquent nécessaire et possible. Nous avons regroupé les catégories assez semblables sur le plan important du mode de vie, tout en nous arrangeant pour qu'il y ait à l'intérieur de chaque type final un nombre suffisant de cas pour nous permettre de poursuivre l'analyse. Ce même tableau statistique indique, en caractères gras à l'intérieur de chaque cellule, auquel des dix-sept types finals chacune des combinaisons initiales a été assignée.

### Comparaison entre les proportions observées et prévues dans les divers modes de vie

Nous devons comparer les changements dans les proportions observées de personnes ayant adopté les divers modes de vie entre 1981 et 1990 aux changements auxquels nous aurions été en droit de nous attendre en partant de l'hypothèse que ces changements sont uniquement attribuables à des changements survenus dans les trois variables sous-jacentes (relations par rapport à la cohabitation, relations par rapport aux études, et relations par rapport au travail rémunéré). Nous devons d'abord calculer les proportions prévues en multipliant simplement, à l'intérieur de chaque groupe d'âge, les probabilités attendues qu'un étudiant-travailleur (la probabilité attendue qu'un étudiant-travailleur habitant avec ses parents serait simplement le résultat du produit, pour une année donnée, de la probabilité générale d'être un étudiant, d'être un travailleur et d'habiter chez ses parents, toutes ces probabilités se retrouvant au sein d'une catégorie d'âge donnée). Nous regroupons les 105 probabilités obtenues dans les mêmes 17 types que les probabilités observées. Nous obtenons ainsi, à la fin des calculs, quatre distributions de chiffres pour les 17 types : les statistiques observées en 1981 et 1990, et les probabilités prévues, selon l'hypothèse de l'indépendance entre les trois variables sous-jacentes, encore une fois en 1981 et 1990. Nous calculons ensuite les chances pour qu'une personne fasse partie d'un type donné, par opposition à tous les autres types, en 1981 et en 1990, à la fois pour les fréquences observées et pour les fréquences prévues. Nous pouvons ensuite établir un ratio de ces possibilités pour 1990 par rapport à 1981, cette fois encore pour les fréquences observées et pour les fréquences

(chefs de familles économiques avec une seule monoparentale); [4] les chefs de familles monoparentales qui n'habitent pas chez leurs propres parents (chefs de familles économiques monoparentales); et [5] les jeunes qui ont adopté des modes de vie familiaux mais pas avec leurs parents (par exemple, avec leurs frères et soeurs, ou leurs grands-parents; ces derniers entretiennent un lien « autre » avec le chef de la famille économique quelle qu'elle soit ou encore ils sont chefs de familles économiques

considérées comme « autres »).

Les relations par rapport au travail rémunéré sont représentées avec encore plus de détails, étant donné que nous désirons saisir l'expérience variée et instable des jeunes en ce qui concerne les moyens de gagner sa vie. Nous avons utilisé quatre variables : activité (employé, en chômage et inactif), durée de l'emploi (au moins un an, moins d'un an, indéterminée), durée de l'épisode de chômage (plus de 13 semaines, 13 semaines ou moins, zéro), et type d'emploi (à plein temps ou moins partiel). Nous avons établi sept types, s'échelonnant de l'inactivité à l'occupation d'un emploi standard : [1] inactivité (inactif, durée indéterminée de l'emploi, zéro semaines de chômage); [2] chômage durant une période limitée (soit inactif, soit en chômage, avec une durée indéterminée de l'emploi, et en chômage durant 13 semaines ou moins); [3] chômage durant une période prolongée (soit inactif, soit en chômage, avec une durée indéterminée de l'emploi à temps plein de 13 semaines); [4] emploi à temps partiel de courte durée (soit employé, en chômage ou inactif, avec une durée d'emploi inférieure à un an, et à temps partiel); [5] emploi à temps partiel de longue durée (soit employé, en chômage ou inactif, avec une durée d'emploi d'un an ou plus, et à temps plein); [6] emploi à temps plein de courte durée (soit employé, en chômage ou inactif, avec une durée d'emploi inférieure à un an, et à temps plein); [7] emploi à temps plein de longue durée (soit employé, en chômage ou inactif, avec une durée d'emploi d'un an ou plus, et à temps plein). Bien entendu, dans leur écrasante majorité, les personnes qui figurent dans les types 2 et 3 proviennent de la catégorie d'activité des sans emploi, et celles qui figurent dans les types 4 à 7 proviennent aussi dans une écrasante majorité de la catégorie d'activité des employés.

La combinaison de ces trois dimensions produit  $3 \times 5 \times 7 = 105$  types possibles, parmi lesquels 99 renferment tous les cas. Comme il est illustré dans le tableau 10.A1, la plupart des



proportion des hommes âgés de 25 ans et plus qui vivent dans des ménages semblables tout en poursuivant leurs études, en travaillant, en étant en chômage ou simplement en étant inactifs.

#### 4. Conclusion

Il semble que dix ans soit une courte période par rapport à la vaste redéfinition des modes de vie adoptés par les jeunes canadiens durant les années 1980. Les circonstances économiques ont changé d'une manière fondamentale. Les jeunes, et dans une mesure importante, leurs familles, ont inventé de nouveaux moyens de s'adapter aux transformations survenues dans la nature et la structure des emplois, aux changements dans les aptitudes exigées sur le marché du travail et la montée des coûts du logement. Ils ont prolongé leurs études, pris un emploi (souvent, un emploi aléatoire) plus tôt dans l'existence, ont combiné les études et le travail rémunéré, ont habité plus longtemps avec leurs parents, ont retardé la formation d'unions maritales et, de plus en plus, ont adopté des contextes familiaux hors norme. Ils ont aussi redéfini les rôles sexuels dans une large mesure, les femmes abandonnant le statut de femme au foyer, prolongeant leurs études et prenant un emploi. En dépit de cette convergence, des différences importantes subsistent entre les sexes : assez paradoxalement, les femmes ont plus tendance à rester plus longtemps aux études, à quitter le toit de leurs parents (quoique plus tard que dans le passé), à trouver du travail et à former des couples (on suppose que c'est avec des partenaires plus âgés).  
Même si davantage de personnes vivent maintenant seules ou avec des colocataires, et même si les unions se forment beaucoup plus tard dans l'existence, les familles—les familles parentales, dans la plupart des cas, mais aussi les familles étendues—jouent toujours un rôle décisif de refuge pour les jeunes, représentant un milieu où ils peuvent déployer leurs nouvelles stratégies en ce qui concerne les études et le marché du travail. On peut se demander à quel point ces arrangements sont négociés avec les familles, mais il est remarquable de constater que la relation suppose souvent que le jeune prenne en charge une partie de ses frais d'existence par l'entremise de travaux rémunérés, même dans le cas des étudiants.  
À plus long terme, les valeurs des jeunes vont probablement être modifiées par cette

## Appendice

### Typologie des modes de vie

La construction de la typologie des modes de vie présuppose que l'on mesure d'abord les trois dimensions sous-jacentes. Les relations par rapport aux études sont déjà mesurées dans le cadre de l'Enquête sur les finances des consommateurs dans une forme qui se prête bien à notre étude : les jeunes sont soit aux études à plein temps, à temps partiel ou pas du tout. Les relations par rapport à la cohabitation sont un peu plus complexes, étant donné que nous devons tenir compte à la fois du type de famille économique et de la position de l'individu par rapport au chef de famille. Nous avons défini cinq types : [1] les jeunes qui vivent toujours chez leurs parents (enfant par rapport au chef de famille, vivant dans tous les types de famille); [2] les familles comportant deux conjoints; [3] les jeunes qui vivent à l'extérieur d'un contexte familial, soit seuls soit avec des colocataires

La construction de la typologie des modes de vie présuppose que l'on mesure d'abord les trois dimensions sous-jacentes. Les relations par rapport aux études sont déjà mesurées dans le cadre de l'Enquête sur les finances des consommateurs dans une forme qui se prête bien à notre étude : les jeunes sont soit aux études à plein temps, à temps partiel ou pas du tout. Les relations par rapport à la cohabitation sont un peu plus complexes, étant donné que nous devons tenir compte à la fois du type de famille économique et de la position de l'individu par rapport au chef de famille. Nous avons défini cinq types : [1] les jeunes qui vivent toujours chez leurs parents (enfant par rapport au chef de famille, vivant dans tous les types de famille); [2] les familles comportant deux conjoints; [3] les jeunes qui vivent à l'extérieur d'un contexte familial, soit seuls soit avec des colocataires

La construction de la typologie des modes de vie présuppose que l'on mesure d'abord les trois dimensions sous-jacentes. Les relations par rapport aux études sont déjà mesurées dans le cadre de l'Enquête sur les finances des consommateurs dans une forme qui se prête bien à notre étude : les jeunes sont soit aux études à plein temps, à temps partiel ou pas du tout. Les relations par rapport à la cohabitation sont un peu plus complexes, étant donné que nous devons tenir compte à la fois du type de famille économique et de la position de l'individu par rapport au chef de famille. Nous avons défini cinq types : [1] les jeunes qui vivent toujours chez leurs parents (enfant par rapport au chef de famille, vivant dans tous les types de famille); [2] les familles comportant deux conjoints; [3] les jeunes qui vivent à l'extérieur d'un contexte familial, soit seuls soit avec des colocataires

L'atténuation est très importante, alors, mais les rôles sexuels et les stéréotypes sont loin d'avoir cessé d'exercer une forte influence sur le mode de vie des jeunes.

Cette atténuation résulte en partie de l'abandon par les femmes des rôles associés à la marginalité en ce qui concerne à la fois les études et le marché du travail (hypothèse 3.2). Cette marginalité s'est considérablement réduite, en particulier pour ceux âgés de 23 ans et plus, tandis qu'elle est restée presque absente pour les hommes (tableau 10.5, ligne 1 à 7).

Les jeunes hommes et les jeunes femmes ont certains points en commun en ce qui concerne le fait d'habiter chez les parents et de former un couple : la propension à habiter avec les parents diminue avec l'âge (lignes 8 à 14), mais le recul a été considérablement plus marqué en 1981 qu'en 1990; et les couples se forment graduellement dans une proportion croissante au fur et à mesure que l'on avance en âge (ligne 15 à 21, mais cette propension a diminué considérablement au cours de la période étudiée.

Hommes et femmes, toutefois, font l'expérience de ces tendances d'une manière quelque peu différente. Traditionnellement, pour tous les groupes d'âge à partir de 16 ans, les femmes étaient les premières à quitter la maison paternelle. C'est toujours vrai en 1990, mais l'écart s'est réduit pour le groupe de 17 à 20 ans. De même, les femmes avaient tendance à former des couples plus tôt que les hommes (on présume que c'est avec des partenaires plus âgés). Cette tendance se vérifie toujours en 1990, mais la source de la différence s'est déplacée : les jeunes femmes âgées de 17 à 22 ans ont réduit l'écart avec leurs contemporains masculins, tandis que la différence entre les sexes s'est en fait accentuée à partir de l'âge de 23 ans, et tout particulièrement chez ceux qui ont atteint 25 ans. Dans l'ensemble, les jeunes hommes de 21 ans et plus ont conservé leur propension plus marquée à rester chez leurs parents de même que leur plus faible propension à former des couples.

Ces changements quant à la différence entre les sexes, en ce qui concerne la cohabitation, correspondent aux changements survenus dans les relations par rapport aux études et au travail. Les jeunes femmes âgées de 17 à 20 ans restent avec leurs parents afin de parfaire leurs études, à la fois à titre d'étudiantes et d'étudiants-travailleuses, faisant ainsi sensiblement les mêmes choix que les jeunes hommes; vers l'âge

de 19 et 20 ans, les jeunes femmes sont encore plus enclines à poursuivre leurs études que les jeunes hommes en 1990, ce qui contraste fortement avec la situation en 1981. Le même processus de convergence se reproduit, mais dans une moindre mesure, entre les jeunes femmes et les jeunes hommes âgés de 21 à 29 ans. Pour ce qui est de trouver du travail—encore une fois, en ce qui concerne ceux qui vivent toujours chez leurs parents—hommes et femmes vivent la même expérience : en 1990, on enregistre une une moindre proportion de jeunes âgés de 17 à 22 ans vivant dans une situation non-standard, et une plus forte proportion chez ceux âgés de 23 ans et plus.

Lorsqu'il s'agit d'étudier la situation des jeunes vivant en couples, les circonstances sont symétriques pour les hommes et les femmes. Les déflections dans les rangs des hommes âgés de 21 ans et plus (ou même de 19 ans et plus) semblent étroitement liées à leur inaptitude à trouver un emploi, en particulier un emploi stable. Les jeunes femmes affichent aussi une diminution dans leur propension à former un couple, mais l'écart se creuse entre elles et les hommes à partir de 23 ans (ligne 21 du tableau 10.5); cet écart s'accompagne d'un recul dans leur niveau d'inactivité, et d'une progression dans leur aptitude à trouver et à conserver un emploi.

Le statut de chef de famille monoparentale est presque totalement une affaire de femmes (ligne 29 à 35), et cette situation va en s'accroissant. Selon toute attente, l'incidence de ce statut augmente avec l'âge, mais on enregistre pour ainsi dire aucun changement notable durant la période en ce qui concerne la proportion de jeunes ayant adopté ce mode de vie, de même que dans leur niveau d'activité dans le système scolaire et sur le marché du travail.

Vivre seul, avec des colocataires ou dans d'autres formes de solidarité familiale semble la solution de rechange adoptée par ceux qui désirent ou qui doivent quitter le foyer de leurs parents, sans pour autant former un couple ou fonder une nouvelle famille. Cette tendance est plus marquée chez les femmes âgées de 17 à 20 ans que chez les hommes, mais elle diminue quelque peu avec l'âge (particulièrement dans le cas de ceux qui vivent seul ou avec des colocataires). Cette situation correspond à la plus grande propension des jeunes femmes à former un couples. Ce modèle général est renforcé durant la période dans le cas de ceux qui vivent seul ou avec des colocataires. On assiste, en particulier, à une augmentation de la

Tableau 10.5  
Hypothèse relative à l'atténuation

Age										
15 à 16 17 à 18 19 à 20 21 à 22 23 à 24 25 à 29 30 à 34										
Personnes inactives vivant en couples	1	Femmes	2,3	6,6	11,2	18,9	27,1	30,4	2,5	30,4
	2	Hommes	-	-	0,9	1,0	2,1	2,5	2,5	2,5
	3	Différence	-	-	-10,3	-17,9	-25,0	-27,9	-	-
	4	Femmes	1,3	2,1	5,6	7,3	12,2	16,3	3,6	16,3
	5	Hommes	-	-	-	1,1	2,2	3,6	-	-
	6	Différence	-	-	-	-6,2	-10,0	-12,7	-	-
	7	Changement dans les différences	-	-	-	-	-	-	-	-
	entre les sexes	-	-	-	-	-	-	-	-	-
	15,2									
	15,2									
Personnes qui vivent chez leurs parents	8	Femmes	97,6	86,6	59,3	39,9	17,4	7,0	2,8	2,8
	9	Hommes	98,6	94,4	80,8	55,9	34,4	14,2	6,0	6,0
	10	Différence	1,0	7,8	21,5	16,0	17,0	7,2	3,2	3,2
	11	Femmes	98,2	90,8	69,8	46,7	31,8	13,6	3,9	3,9
	12	Hommes	98,9	93,8	82,3	63,9	48,9	22,2	9,1	9,1
	13	Différence	0,7	3,0	12,5	17,2	17,1	8,6	5,2	5,2
	14	Changement dans les différences	-0,3	-4,8	-9,0	1,2	0,1	1,4	2,0	2,0
	entre les sexes	-0,3	-4,8	-9,0	1,2	0,1	1,4	2,0	2,0	2,0
	14									
	14									
Personnes vivant en couples	15	Femmes	-	3,9	20,8	37,5	56,8	71,9	78,8	78,8
	16	Hommes	-	0,0	5,7	19,2	37,9	63,7	77,4	77,4
	17	Différence	-	-3,9	-15,1	-18,9	-18,9	-8,2	-1,4	-1,4
	18	Femmes	1,3	2,4	11,1	23,9	41,9	61,3	73,5	73,5
	19	Hommes	-	0,0	2,9	10,3	21,4	49,0	67,5	67,5
	20	Différence	-	-2,4	-8,2	-13,6	-20,5	-12,3	-6,0	-6,0
	21	Changement dans les différences	-	1,5	6,9	4,7	-1,6	-4,1	-4,6	-4,6
	entre les sexes	-	1,5	6,9	4,7	-1,6	-4,1	-4,6	-4,6	-4,6
	21									
	21									
Personnes vivant seules ou avec des colocataires	22	Femmes	-	5,4	15,4	14,8	18,3	13,2	8,7	8,7
	23	Hommes	-	2,3	10,0	19,5	21,9	18,1	13,0	13,0
	24	Différence	-	-3,1	-5,4	4,7	3,6	4,9	4,3	4,3
	25	Femmes	-	3,1	11,8	18,6	16,1	15,5	12,0	12,0
	26	Hommes	-	2,8	10,6	20,2	23,4	24,1	19,9	19,9
	27	Différence	-	-0,3	-1,2	1,6	7,3	8,6	7,9	7,9
	28	Changement dans les différences	-	2,8	4,2	-3,1	3,7	3,7	3,6	3,6
	entre les sexes	-	2,8	4,2	-3,1	3,7	3,7	3,7	3,6	3,6
	28									
	28									
Chets de famille monoparentale	29	Femmes	-	-	1,4	3,0	4,6	5,3	7,9	7,9
	30	Hommes	0,0	0,0	0,0	0,0	-0,6	0,7	0,7	0,7
	31	Différence	-	-	-1,4	-3,0	-4,6	-7,2	-7,2	-7,2
	32	Femmes	-	-	2,0	4,2	5,2	5,5	8,5	8,5
	33	Hommes	-	0,0	0,0	0,0	0,0	0,0	0,6	0,6
	34	Différence	-	-	-2,0	-4,2	-5,2	-5,5	-7,9	-7,9
	35	Changement dans les différences	-	-	-0,6	-1,2	-0,6	-0,7	-0,7	-0,7
	entre les sexes	-	-	-0,6	-1,2	-0,6	-0,7	-0,7	-0,7	-0,7
	35									
	35									
Personnes vivant dans d'autres types de solidarité familiale	36	Femmes	-	1,8	2,8	4,9	2,9	2,1	1,3	1,3
	37	Hommes	0,9	1,9	2,6	5,1	5,7	3,2	2,3	2,3
	38	Différence	-	0,1	-0,2	0,2	2,8	1,1	1,0	1,0
	39	Femmes	-	1,6	5,3	6,6	5,1	4,3	1,9	1,9
	40	Hommes	-	2,1	3,3	4,8	6,1	4,6	2,7	2,7
	41	Différence	-	0,5	-2,0	-1,8	1,0	0,3	0,8	0,8
	42	Changement dans les différences	-	-	-1,8	-2,0	-1,8	-0,8	-0,2	-0,2
	entre les sexes	-	-	-1,8	-2,0	-1,8	-0,8	-0,2	-0,2	-0,2
	42									
	42									

Source : - indique une variation de l'échantillon supérieure à 25 %.  
Canada  
Source : Calculs effectués par les auteurs à partir des données de l'Enquête sur les finances des consommateurs de Statistique



Tableau 10.4  
Coefficients de dissimilitude selon l'âge entre les distributions d'hommes et de femmes par type de mode de vie, 1981 et 1990

Age		Pourcentage					
15 à 16	17 à 18	19 à 20	21 à 22	23 à 24	25 à 29	30 à 34	
3,1	8,3	21,5	21,6	26,6	32,9	41,7	1981
5,2	6,9	16,5	19,4	25,5	23,4	31,3	1990
2,1	-1,4	-5,0	-2,2	-1,1	-9,5	-10,4	Changement

(nous ne tenons pas compte du ratio encore plus élevé dans le groupe âgé de 25 à 29 ans, parce que ces chiffres ne sont pas entièrement fiables). Un certain nombre de jeunes continuent d'habiter chez leurs parents tout en ayant (dans la plupart des cas) quitté l'école : beaucoup occupent une place marginale par rapport au marché du travail (hypothèse 2.3), mais on trouve aussi des jeunes qui ne sont pas partis même s'ils occupent des emplois établis (hypothèse 2.4). En 1981, ces modèles se retrouvaient rarement chez les très jeunes, étaient de plus en plus répandus chez ceux dans la vingtaine, et redevenaient plus rares par la suite, plus particulièrement après 25 ans. Des changements modestes, mais systématiques se sont produits au cours de la décennie. Ces modèles sont désormais moins répandus chez les jeunes de 20 ans et moins, qui fréquentaient l'école dans une plus grande proportion à titre d'étudiants ou d'étudiants-travailleurs, mais ils sont de plus en plus courants après cet âge. Les personnes âgées de 23 à 29 ans, en particulier, semblent éprouver des difficultés à obtenir du marché du travail ce qui leur est nécessaire pour quitter le nid familial, il se peut aussi que les normes de la société soient en train de changer à cet égard.

Est-ce que les changements dans ces modèles dépassent ceux que l'on pourrait attendre de distributions sous-jacentes ? La proportion de personnes inactives ou de travailleurs aléatoires qui habitent toujours chez leurs parents (ligne 17) semble avoir quelque peu diminué chez les jeunes de 17 à 22 ans, la popularité des études semblant à la hausse dans ce groupe, toutefois, cette proportion semble avoir augmenté (en résultat net) au-delà de ce point, ce qui reflète probablement l'écart qui sépare ces personnes de l'indépendance après un âge où la poursuite des études est une stratégie. Nous soulignons par ailleurs le paradoxe voulant que, même si la proportion des jeunes de 15 et 16 ans qui sont inactifs ou

En ce qui concerne la propension des travailleurs établis à continuer à habiter chez leurs parents (ligne 21), les changements nets semblent contredire les changements bruts. À la fin de la période, les groupes d'âge plus jeunes comportent une plus faible proportion de personnes qui adoptent ce mode de vie, mais cette proportion n'a pas autant diminué que l'on aurait pu s'y attendre en raison des études plus longues et du report de l'entrée sur le marché du travail; il semble en effet qu'une bonne proportion de jeunes ont une affinité pour le style de vie correspondant. Inversement, la proportion quelque peu supérieure de travailleurs établis qui habitent chez leurs parents après l'âge de 25 ans demeure inférieure aux prévisions : à ces âges, l'attrait de quitter la maison paternelle une fois que les ressources sont suffisantes semble prendre la relève.

Dans quelle mesure les changements que nous venons d'examiner sont-ils semblables pour les deux sexes ? Un moyen de déterminer les différences entre les sexes consiste à calculer les coefficients de dissimilitude liés à l'âge entre les distributions d'hommes et de femmes dans les modes de vie. Tel qu'il est illustré au tableau 10.4, les différences entre les sexes augmentent radicalement avec l'âge : en 1981, ces différences étaient à peine perceptibles à l'âge de 15 et 16 ans, mais elles atteignaient environ le cinquième de la plage potentielle à l'âge de 19 et 20 ans, et les deux cinquièmes après 30 ans. Les différences ont diminué de façon très importante à tous les âges durant la décennie (hypothèse 3.1), et particulièrement après 25 ans; il n'y a qu'une seule petite exception chez les 15-16 ans où les femmes adoptent plus volontiers le modèle étudiant-travailleur.

Tableau 10.3

## Profils de données pour l'hypothèse relative à la déviation par rapport à la norme

Âge	15 à 16	17 à 18	19 à 20	21 à 22	23 à 24	25 à 29	30 à 34
-----	---------	---------	---------	---------	---------	---------	---------

Pourcentage	Habitent seuls ou avec des colocataires						
	1981	1990	Changement	-	-	-	-
1	4,2	3,6	-0,6	-	-	-	-
2	12,5	11,1	-1,4	-	-	-	-
3	17,0	19,5	2,5	-	-	-	-
Vivent comme chef de famille monoparentale							
4	0,0	0,7	0,7	-	-	-	-
5	0,0	0,7	0,7	-	-	-	-
6	0,0	2,0	2,0	-	-	-	-
Vivent dans d'autres types de solidarité familiale							
7	0,9	2,7	1,9	-	-	-	-
8	0,8	4,3	3,5	-	-	-	-
9	-0,1	5,6	5,7	-	-	-	-
Étudiants-travailleurs qui habitent chez leurs parents							
10	31,5	13,8	17,7	0,99	0,98	1,17	0,2
11	41,1	9,0	32,1	5,9	3,9	4,0	0,6
12	9,6	22,8	13,2	11,7	5,7	1,8	0,2
13	1,02	1,04	0,99	0,98	0,98	1,17	0,2
Inactifs ou travailleurs aléatoires habitant chez leurs parents							
14	7,0	30,9	23,9	19,9	11,8	4,8	1,9
15	3,5	27,9	24,4	17,1	17,1	8,4	3,0
16	-3,5	-3,0	0,5	1,8	5,3	3,6	1,1
17	1,20	0,98	0,98	0,98	1,02	1,13	1,00
Travailleurs établis habitant chez leurs parents							
18	-	3,3	11,9	14,5	9,3	5,3	2,5
19	-	2,1	8,4	10,8	13,3	8,0	3,3
20	-	-1,2	-3,5	-8,7	4,0	2,7	0,8
21	Observé/Prévu	1,47	1,30	1,08	1,21	0,93	0,93

**Nota :** - indique une variation de l'échantillon supérieure à 25 %, dans toutes les autres cellules, la variation de l'échantillon est inférieure à 16,5 %. Se reporter à l'Appendice pour obtenir la dérivation des résultats prévus pour les lignes 13, 17 et 21.

**Source :** Calculs effectués par les auteurs à partir des données de l'Enquête sur les finances des consommateurs de Statistique Canada.

ceux de 24 ans et moins (ligne 12 du tableau 10.3). Deux procédés distincts sont sans doute à l'oeuvre simultanément : les étudiants travaillent aujourd'hui occasionnellement pour financer leurs besoins de consommation, et les jeunes dans la vingtaine vivent une certaine ambiguïté qui les empêche de définir s'ils sont des étudiants qui doivent travailler, ou des travailleurs qui suivent une formation continue. Au bout du compte, pour la presque totalité des jeunes âgés de 17 ans et plus, les étudiants-travailleurs représentent une proportion aussi importante de ceux qui fréquentent l'école que les étudiants à plein temps inactifs.

Même si ces tendances décrivent bien la réalité, pouvons-nous affirmer que les jeunes favorisent ces modes de vie dans une plus attente de mesure que celle à laquelle on pourrait s'attendre à partir de la simple combinaison des tendances séparées conduisant à quitter la maison paternelle, à étudier plus longtemps et à participer plus largement au marché du travail ? Une comparaison des changements observés dans la proportion des étudiants-travailleurs par rapport aux changements prévus à partir de la simple combinaison de l'évolution dans les trois variables sous-jacentes (ligne 13) révèle qu'une véritable déviation par rapport aux normes se retrouve dans au moins quelques-uns des groupes d'âge : chez les personnes âgées de 17 à 20 ans, le mode de vie étudiant-travailleur attire vraiment les personnes de façon disproportionnée, et il semble que ce mode de vie soit en train de devenir un style de vie en soi



(et l'ajout du type 15 ne change en rien le modèle que nous allons décrire); les types 2, 3, 4, 8, 9, 12, 13 comportent tous une portion significative de travail rémunéré (et, là encore, l'ajout du type 15 ne modifie en rien le modèle). Comme on pourrait s'y attendre, la fréquentation scolaire diminue radicalement suivant toute la plage d'âge (lignes 7 et 8 du tableau 10.2), tandis que le travail rémunéré va en croissant (lignes 10 et 11); il convient, toutefois, de noter qu'environ le tiers des jeunes âgés de 15 et 16 ans occupaient déjà un emploi en 1981, et seulement un peu plus des deux tiers en occupent un après 30 ans.

Les changements ont été assez spectaculaires durant la décennie. La fréquentation scolaire est en hausse dans tous les groupes d'âge et de manière encore plus remarquable pour les jeunes âgés de 17 à 24 ans (ligne 9). L'occupation d'un emploi (ligne 12) a augmenté à la fois chez les plus jeunes (de 15 à 18 ans) et chez les plus âgés (25 ans et plus). Les jeunes gens âgés de 19 à 24 ans n'ont toutefois pas accru leur présence sur le marché du travail, et on a enregistré une diminution frappante chez ceux qui sont âgés de 21 et 22 ans. Comme nous le démontrerons plus clairement ci-après, ces groupes d'âge intermédiaires ont de toute évidence réorienté leur stratégie: ils fréquentent l'école en nombre croissant plutôt que de se chercher du travail, tandis qu'une proportion importante utilise la formule hybride qui consiste à combiner les deux activités.

Même si la participation au marché du travail est plus répandue dans de nombreux groupes d'âge, s'y intégrer solidement devient de plus en plus difficile pour les jeunes qui ont moins de 25 ans. La proportion de travailleurs établis (qui ont occupé un emploi à temps plein durant au moins un an) augmente avec l'âge (lignes 13 et 14), même si elle n'atteint pas un niveau supérieur à 50 % des personnes dans la trentaine. Mais, en conformité avec l'hypothèse 1.5, la pente de cette augmentation avec l'âge est franchement inférieure en 1990 par rapport à ce qu'elle était en 1981 (ligne 15). Les mêmes difficultés à s'établir sur le marché du travail sont aussi manifestes lorsque l'on considère seulement le groupe de jeunes qui ont quitté l'école et qui occupent un emploi (hypothèse 1.6, lignes 16 à 18) ou même seulement le sous-ensemble du dernier groupe qui a quitté le giron familial (hypothèse 1.7, lignes 19 à 21). Le travail aléatoire résulte par conséquent non seulement du fait que davantage de personnes doivent jongler avec les contraintes qui découlent de la

situation d'étudiant et de travailleur en simultané: en effet, même ceux qui ont quitté l'école, trouvés du travail et qui ont adopté une forme indépendante de cohabitation éprouvent de plus en plus de difficulté à devenir des travailleurs établis.

Les résultats compilés au tableau 10.3 concernent les hypothèses relatives à la déviation par rapport à la norme. Vivre seul ou avec des colocataires (lignes 1 à 3) est bien entendu moins répandu chez les très jeunes (qui habitent avec leurs parents) et chez les groupes plus âgés (qui ont formé un couple). Cette catégorie atteint un sommet dans les groupes d'âge moyen où elle peut toucher jusqu'à un jeune sur cinq. En conformité avec l'hypothèse 2.1, cette forme de cohabitation est plus répandue à la fin de la période pour les gens âgés de 21 ans et plus, et 1981, les unions maritales étaient une norme plus respectée parmi les jeunes ayant atteint le seuil du milieu de la vingtaine. Être le chef d'une famille monoparentale (lignes 4 à 6) est toujours un style de vie très minoritaire, même dans les groupes d'âge plus avancés, où cette catégorie ne touche pas plus d'une personne sur vingt. Même si les changements survenus au cours de la période ne sont pas spectaculaires, il y a une légère augmentation de la proportion de chefs de famille monoparentale à partir de 21 ans. Les autres formes de solidarité familiale (habiter avec des frères et sœurs, oncles et tantes, grands-parents), comme il est décrit de la ligne 7 à la 9, présentent sensiblement les mêmes caractéristiques que celles qui existent lorsque l'on vit seul ou avec des colocataires: ces formes sont plus répandues vers le milieu de la plage d'âge, et leur utilisation augmente au cours de la période dans toutes les catégories sauf celles des plus jeunes. Ces modes de vie sont de plus en plus retenus par les personnes qui désirent ou qui doivent quitter le nid familial et qui ne peuvent pas pour autant ou ne veulent pas former de couple.

Tirailles entre la nécessité de poursuivre leurs études et les difficultés de se trouver un emploi, les jeunes ont organisé leur vie d'une manière différente, particulièrement ceux qui habitent toujours chez leurs parents. Que font les jeunes dans le nid familial encombré? Même si la situation mixte d'étudiant et de travailleur (hypothèse 2.2) est très répandue en 1981, entre 15 ans et 18 ans, celle-ci diminue radicalement avec l'âge. Ce modèle a connu une expansion spectaculaire au cours de la décennie dans tous les groupes d'âge, et plus particulièrement chez



Tableau 10.2

Age	15 à 16	17 à 18	19 à 20	21 à 22	23 à 24	25 à 29	30 à 34
Habitent chez leurs parents	1	1	1	1	1	1	1
	1981	1981	1981	1981	1981	1981	1981
	98,5	90,6	70,3	47,7	25,8	10,9	4,4
	1990	99,0	76,2	55,7	40,2	17,7	6,6
Changement		0,5	5,9	8,0	14,4	6,8	2,2
Vivent en couples (parmi ceux qui n'habitent pas chez leurs parents)	4	4	4	4	4	4	4
	1981	1981	1981	1981	1981	1981	1981
	22,3	45,5	31,1	38,6	53,5	67,0	75,5
	1990	17,1	31,1	38,6	53,5	67,0	75,5
Changement	-	-	-14,4	-16,1	-10,4	-9,3	-6,1
Surtout aux études	7	7	7	7	7	7	7
	1981	1981	1981	1981	1981	1981	1981
	91,6	63,2	31,6	17,4	8,2	3,4	1,8
	1990	95,5	76,4	44,5	16,6	5,0	2,8
Changement	3,9	13,2	12,9	13,2	8,4	1,6	1,0
Participant au marché du travail	10	10	10	10	10	10	10
	1981	1981	1981	1981	1981	1981	1981
	33,4	51,8	57,5	62,8	64,7	67,4	68,9
	1990	42,4	57,6	55,8	64,6	70,1	70,4
Changement	9,0	4,0	0,1	-7,0	-0,1	2,7	1,5
Travailleurs établis	13	13	13	13	13	13	13
	1981	1981	1981	1981	1981	1981	1981
	5,7	24,3	38,6	44,8	51,0	55,4	54,8
	1990	3,5	15,8	29,2	41,4	52,3	54,8
Changement	-	-2,1	-8,6	-9,4	-3,4	1,3	-0,6
Travailleurs établis (parmi ceux qui ont terminé leurs études et qui occupent un emploi)	16	16	16	16	16	16	16
	1981	19,5	43,7	53,3	62,0	69,2	73,9
	1990	18,4	33,0	48,5	56,9	66,3	70,4
Changement	-	-1,1	-10,7	-6,7	-5,1	-2,9	-3,5
Travailleurs établis (parmi ceux qui ont terminé leurs études, qui occupent un emploi et ont quitté leurs parents)	19	19	19	19	19	19	19
	1981	14,7	48,3	55,0	62,7	69,0	73,6
	1990	13,3	30,4	49,8	58,9	67,0	70,1
Changement	-1,4	-17,9	-5,3	-3,8	-2,1	-3,5	-

Canada.

**Source :** Calculs effectués par les auteurs à partir des données de l'Enquête sur les finances des consommateurs de Statistique Canada.

### 3. Résultats

Les distributions détaillées des jeunes, selon les groupes d'âge, au sein des 17 types de mode de vie pour 1981 et 1990 sont présentées dans un appendice que l'on peut se procurer auprès des auteurs. Pour la majeure partie de l'analyse, nous utilisons des tableaux plus simples qui décrivent des ratios de types de modes de vie.

proportions grandissantes à des âges plus avancés (hypothèse 1.1), et particulièrement autour de 23 et 24 ans, âges où l'augmentation de cette forme de cohabitation atteint les 14 % (ligne 3). Par conséquent, on peut s'attendre à ce que des couples se forment moins souvent (hypothèse 1.2), et particulièrement entre 19 et 29 ans. Mais les deux phénomènes ne sont pas le reflet parfait l'un de l'autre : même chez les jeunes qui n'habitent plus avec leurs parents, la proportion de ceux qui forment un couple est aussi sur le déclin (ligne 6 du tableau 10.2). Autrement dit, les autres modèles de cohabitation ont profité, et tout particulièrement de 20 ans en montant.

l'Annexe pour obtenir plus de précisions.) En ce qui concerne le groupe le plus populaire, c'est-à-dire celui des jeunes qui vivent chez leurs parents, nous avons établi cinq catégories : [1] ceux qui dont l'unique activité est de fréquenter l'école; [2] ceux dont les activités scolaires prédominent par rapport à l'occupation d'un emploi rémunéré; [3] les travailleurs aléatoires, pour lesquels le travail est l'activité principale, même s'ils n'ont pas acquis beaucoup d'ancienneté dans un emploi à temps plein, et même si certains entretiennent toujours certains liens avec les études; [4] les travailleurs établis qui occupent un emploi à temps plein depuis une période assez longue; et finalement [5] ceux qui sont marginalisés en ce qui concerne le marché du travail sans pour autant poursuivre des études.

En ce qui concerne les couples, nous distinguons cinq types : [6] les cas où les études occupent une place prépondérante; [7] les travailleurs en chômage qui ne sont pas aux études; [8] les travailleurs aléatoires (qui ont occupé un emploi à temps plein durant moins d'un an); [9] les travailleurs établis; et [10] l'inactivité sans fréquentation scolaire. En ce qui concerne ceux qui vivent seuls ou avec des colocataires, leur petit nombre nous force à faire le type [11] les cas où la fréquentation scolaire est prépondérante; dans le type [12] les travailleurs aléatoires; dans le type [13] les travailleurs établis; et dans le type [14] les personnes qui évoluent en marge du marché du travail et qui ne sont pas aux études. Le petit nombre de chefs de famille monoparentale nous donne seulement la possibilité de faire la distinction entre : [15] ceux qui travaillent ou qui étudient ou les deux à la fois; et [16] ceux qui ne tombent dans aucune de ces catégories. Finalement, nous avons dû établir une seule catégorie pour les rares personnes [17] qui ont adopté d'autres modes de vie. Même si certains de ces 17 types réunissent des jeunes qui vivent des situations très différentes, il reste qu'ils sont néanmoins révélateurs des principaux aspects de notre taxonomie de même que les ensembles de données qui seront utilisés pour les mettre à l'essai; ces ensembles de données sont constitués, dans la plupart des cas, de proportions et de ratios qui concernent les 17 types.

des jeunes passent effectivement de la dépendance à l'indépendance entre l'âge de 15 ans et de 34 ans, il semble raisonnable d'examiner comment leurs modes de vie sont répartis, en résultat net, par rapport à diverses étapes de cette plage d'âge, et comment cette distribution évolue avec le temps.

L'analyse se concentre sur les années 1980, une période qui a connu des changements radicaux en ce qui concerne les circonstances économiques que doivent affronter les jeunes. Le taux de chômage, pour les jeunes âgés de 15 à 24 ans, était à peu près le même en 1981 (13,1 %) que celui de 1990 (12,7 %). Il semble raisonnable de sélectionner des années pendant lesquelles ce taux est semblable étant donné que cette variable est directement liée à l'établissement du mode de vie. Ceci étant dit, il est évident que les conditions économiques ont changé de façon dramatique durant la période, et que ce changement se reflète largement dans la distribution des modes de vie. Les contraintes et les possibilités qui se présentent aux jeunes ont été profondément modifiées et nous désirons observer comment cette génération a réagi. Tout d'abord, on a assisté à un recul impressionnant dans les gains relatifs des jeunes tout au long de la décennie : environ 20 % pour les 17-24 ans et 10 % pour les 25-29 ans (Morissette, Myles, et Picot, 1993). Deuxièmement, Ridell (1995) avance que le chômage relatif a augmenté pour les jeunes moins scolarisés. Troisièmement, le coût relatif du logement a augmenté au cours de la décennie (le sous-indice du coût du logement a progressé de 11 % plus rapidement au cours de cette décennie que l'ensemble de l'indice des prix à la consommation). Par conséquent, en 1990, les jeunes affrontaient des obstacles financiers beaucoup plus importants lorsqu'ils envisageaient de quitter le toit familial, de former un couple et d'établir un ménage indépendant. De plus, ceux-ci étaient de plus en plus encouragés à étudier plus longtemps en raison des conditions de l'emploi.

La construction de notre typologie des modes de vie a fait appel à une classification croisée de cinq catégories décrivant les relations de cohabitation, de trois catégories pour les relations par rapport aux études et de sept catégories en ce qui concerne les relations par rapport au travail. Les 105 types possibles qui en résultent sont ensuite réduits à un ensemble plus maniable de 17 types. (Se reporter à

Tableau 10.1  
Taxonomie des modes de vie

Profil de données (Ratios des types de mode de vie)	Hypothèses et sous-hypothèses
---	-------------------------------

1. Report	1.1 Départ tardif du foyer paternel	(1 à 5)/tous
	1.2 Formation tardive d'un couple, même chez ceux ayant quitté leurs parents	(6 à 10)/(6 à 7)
	1.3 Scolarité prolongée	(1,2,6,11) /tous
	1.4 Participation précoce au marché du travail	(2,3,4,8,9,12,13)/tous
	1.5 Période prolongée de travail aléatoire	(4,9,13)/(2 à 5, 7 à 10, 12 à 14)
	1.6 Période prolongée de travail aléatoire même pour ceux qui ont terminé leurs études et qui occupent un emploi	(4,9,13)/(3,4,8,9,12,13)
	1.7 Période prolongée de travail aléatoire même pour ceux qui ont terminé leurs études, occupent un emploi et ont quitté le foyer paternel	(9,13)/(8,9,12,13)
	2. Déviation par rapport à la norme	
	2.1 Propension croissante à adopter un mode de vie différent des formes familiales standard	(11 à 14)/tous; (15,16)/tous; 17/ tous
	2.2 Proportion croissante des étudiants-travailleurs à habiter chez leurs parents	2/tous
	2.3 Proportion croissante des personnes inactives ou des travailleurs aléatoires à habiter chez leurs parents	(3,5)/tous
	2.4 Proportion croissante de travailleurs établis à habiter chez leurs parents	4/tous
	3. Atténuation des différences entre les sexes	
	3.1 Atténuation, mais persistance de différences entre les sexes en fonction de l'âge	Coefficients de dissimilitude chez tous les types
	3.2 Proportion décroissante de femmes inactives vivant en couples	10/tous
	3.3 Propension décroissante des femmes « plus jeunes » à quitter le toit paternel plus tôt que les hommes	(1 à 5)/tous
	3.4 Propension croissante des femmes « plus âgées » à former des couples plus tôt que les hommes	(6 à 10)/tous
	3.5 Propension croissante des hommes « plus âgés » à vivre seuls ou avec des colocataires	(11 à 14)/tous
	3.6 Propension croissante des hommes « plus âgés » à devenir chef de famille monoparentale	(15, 16)/tous
	3.7 Propension croissante des hommes et des femmes à choisir d'autres types de solidarité familiale	17/tous

Nota : Se reporter au texte pour obtenir les définitions des types de mode de vie utilisés dans la colonne 2.

fréquentier l'école; de 17 à 18 ans, ceux qui sont à peine sortis de cette situation; de 19 à 20 ans, ceux qui ont largement atteint l'âge de la majorité légale; de 21 à 22 ans, et de 23 à 24 ans, ceux qui sont en train d'orienter leur vie et se préparent à s'établir; de 25 à 29 ans, ceux qui approchent de la stabilité; et finalement, le sous-groupe qui s'étend de 30 à 34 ans, qui représente la norme en matière de situation d'adulte autonome et qui sert de point de comparaison avec les autres groupes d'âge. Il est logique que ces groupes soient plus restreints à des âges plus jeunes, parce qu'à cette époque les modes de vie changent plus rapidement et que les groupes soient plus larges avec les groupes plus âgés, d'autant plus qu'ils ont adopté des modes de vie non-standard ou qui adoptent des modes de vie non-standard n'ont jamais fait l'expérience d'une plus grande autonomie auparavant, ou encore que les jeunes gens qui font preuve actuellement d'une plus grande autonomie auront consolidé leur situation. Cependant, étant donné que la vaste majorité

Il convient de souligner que les changements dans la distribution des modes de vie entre les groupes d'âge reflètent les déplacements nets, et non tous les mouvements entre catégories. Nous ne pouvons tenir pour acquis que les jeunes qui reportent actuellement certaines transitions ou qui adoptent des modes de vie non-standard n'ont jamais fait l'expérience d'une plus grande autonomie auparavant, ou encore que les jeunes gens qui font preuve actuellement d'une plus grande autonomie auront consolidé leur situation. Cependant, étant donné que la vaste majorité

parce qu'alors on peut s'attendre à ce que la situation se stabilise graduellement'.



## 2. Données et méthodes

Afin d'examiner ces modèles, nous avons utilisé l'Enquête sur les finances des consommateurs étant donné que celle-ci comporte un échantillon suffisamment large pour permettre une étude détaillée des modes de vie, même au sein de groupes particuliers formés selon l'âge ou le sexe. De plus, l'EFC renferme une quantité impressionnante de renseignements factuels concernant les trois dimensions des modes de vie. Étant donné qu'elle est menée sur une base annuelle depuis une assez longue période, cette enquête nous permet de détecter l'évolution dans les modes de vie des jeunes.

Nous utilisons des méthodes statistiques assez simples, comme des pourcentages et des coefficients de dissimilitude, étant donné que notre objectif est de mettre en relief les changements survenus dans le temps plutôt que d'offrir une modélisation des causes des processus sous-jacents. Nos principaux défis méthodologiques portent sur la définition appropriée des groupes d'âge, la période de temps sur laquelle sont basées les comparaisons et finalement la construction d'une typologie des modes de vie devant être réduite à un ensemble raisonnable de catégories.

Nous essayons d'éviter d'imposer des limites arbitraires à l'âge auquel la jeunesse commence et finit, en particulier parce que nous nous intéressons aux modèles de report dans le temps. Nous avons suivi la méthode assez répandue qui consiste à sélectionner les limites d'âge de 15 ans et de 34 ans. De fait, les données révèlent que très peu de jeunes quittent la maison ou l'école à 15 ans ou à 16 ans. La transition vers l'indépendance est rarement amorcée à ces âges. Toutefois, vers l'âge de 30 ans, la plupart ont quitté la maison et l'école, même s'ils n'ont pas trouvé un poste régulier sur le marché du travail ou s'ils ne forment pas une union stable. La transition vers l'âge adulte semble être complétée à cet âge.

Étant donné que nous nous intéressons à ce qui arrive aux jeunes quand ils vieillissent (particulièrement en ce qui concerne le report de certaines transitions et le prolongement d'épisodes dans le cadre de modes de vie non standard), nous examinons des catégories d'âge qui sont définies de manière assez précise. Afin d'équilibrer ce besoin de détails avec la nécessité de faire preuve de parcimonie, sept groupes d'âge ont été définis : de 15 à 16 ans, ceux qui sont toujours des adolescents et doivent

les trois derniers cas exposés, nous sommes en droit de nous demander si ces combinaisons hybrides attirent les jeunes en plus grand nombre que l'on pourrait s'y attendre simplement en raison des changements indépendants qui se produisent dans les distributions des trois dimensions sous-jacentes : relations de cohabitation, relations par rapport aux études et relations par rapport au travail. Si c'est le cas, alors ces modes de vie non standard pourraient être le résultat de véritables préférences de la part des jeunes, plutôt que de découler simplement des contraintes de la situation. Afin de vérifier ces hypothèses, les proportions observées de ces types de modes de vie seront comparées aux proportions prévues (auxquelles on pourrait s'attendre). (On décrit en annexe de quelle façon ces proportions prévues sont estimées.)

Il se peut que l'**atténuation** des différences entre les sexes (hypothèse 3.1) origine en partie de la diminution de la proportion de femmes qui se retrouvent exclusivement dans des unions de type matrimonial ou familial (hypothèse 3.2). Nous pourrions aussi nous attendre à une atténuation des différences entre les sexes au sein des groupes d'âge plus jeunes : la proportion de femmes qui quittent le foyer de leurs parents plus tôt dans l'existence que les hommes diminue à la fois parce que les temps sont plus difficiles sur le plan économique et aussi parce qu'elles se consacrent plus longtemps à leurs études et à un travail rémunéré (hypothèse 3.3). Dans les groupes plus âgés, les différences entre les sexes risquent par ailleurs de s'accroître pour certaines dimensions : les femmes peuvent affirmer leur propension traditionnellement plus élevée à quitter la maison et à former un couple, tandis que les hommes maintiennent le statu quo, ne s'engageant pas dans des modes de vie indépendants probablement parce qu'ils considèrent cet engagement trop exigeant du point de vue des normes ou des ressources (hypothèse 3.4). Les hommes plus « âgés » qui quittent le toit paternel vont dans des proportions beaucoup plus importantes soit vivre seuls soit avec des colocataires, à l'extérieur de tout mode de vie familial (hypothèse 3.5), tandis que les femmes plus « âgées » « devieront dans des proportions beaucoup plus importantes des chefs de famille monoparentale (hypothèse 3.6). Finalement, d'autres formes de solidarité familiale seront le fait du nombre croissant de femmes et d'hommes qui ont quitté la maison paternelle sans pour autant former un couple (hypothèse 3.7).

Dans la section suivante du présent chapitre, nous étudions ces modèles plus en détail et à la section 2 nous donnons un aperçu de la méthode suivie et des données qui ont été utilisées. Les principaux résultats sont présentés à la section 3. En particulier, nous sommes arrivés à la conclusion que les années 1980 ont été une période de changement rapide dans les modes de vie des jeunes Canadiens. Une proportion importante d'entre eux ont retardé le moment de former un couple et ont continué de vivre avec leurs parents pour une période prolongée. Pour citer un exemple, en 1981, environ 26 % des jeunes âgés de 23 à 24 ans vivaient avec leurs parents, tandis qu'en 1990, 40 % d'entre eux n'ont pas quitté le foyer familial. De plus, les jeunes prolongent leurs études, sans toutefois avoir plus de facilité à intégrer le marché du travail. Même ceux qui ont quitté l'école, ont trouvé un emploi et vivent de façon indépendante ne sont toujours pas des travailleurs « établis ». Finalement, nous avons aussi constaté que par rapport à leurs compagnons, les jeunes femmes ont en réalité plus de possibilité d'étudier plus longtemps, de quitter le foyer familial, de trouver du travail et de former un couple plus tôt.

## 1. Taxonomie du report, de la déviation et de l'atténuation

En nous inspirant principalement des travaux de Galland, nous étudions trois principaux modèles en ce qui concerne l'évolution de la situation des jeunes gens durant les années 1980 au Canada. Le premier modèle décrit dans quelle mesure il existe une tendance vers le report : on accède à l'âge adulte (terminer ses études, trouver du travail, quitter la maison, former une union) plus tard dans l'existence que ses prédécesseurs ne le faisaient. Deuxièmement, ce prolongement de la jeunesse entraîne-t-il une multiplication des modes de vie inhabituels ? Cette déviation par rapport à la norme pourrait se traduire, par exemple, par une combinaison des études et du travail, ou encore par ne plus habiter chez ses parents sans pour autant former un couple. Troisièmement, dans quelle mesure assiste-t-on à une atténuation des différences entre les sexes ? De façon plus spécifique, quelle est la tendance dans la proportion de femmes vivant exclusivement dans une relation matrimoniale ou familiale et dans la proportion de celles-ci qui prolongent leurs études ?

Le modèle du **report** du moment auquel on accède à des rôles d'adulte englobe les trois aspects du mode de vie—la cohabitation, les

études, et le travail—de sorte qu'il se subdivise en un certain nombre de sous-modèles. (Se reporter au tableau 10.1.) Il est possible que les jeunes quittent maintenant le foyer familial plus tard dans l'existence (hypothèse 1.1). Il se peut aussi que leur propension à former un couple, soit marié, soit en union de fait, diminue aussi, même parmi ceux qui ont quitté le toit familial (hypothèse 1.2). De plus, les études, qu'elles soient à plein temps ou à temps partiel, durent peut-être aussi plus longtemps (hypothèse 1.3). Du façon paradoxale, la participation au marché du travail peut aussi s'amorcer à un âge plus tendre (hypothèse 1.4). Mais, en conformité avec la notion du report, cette activité prendra de plus en plus la forme d'un travail aléatoire plutôt que d'une trajectoire d'emploi qui contribue à asséoir les jeunes dans leurs rôles d'adulte et dans des modes de vie correspondants (hypothèse 1.5). Cette situation peut se retrouver même chez les jeunes qui ont quitté l'école et qui occupent un emploi (hypothèse 1.6), de même que chez ceux qui ont aussi quitté la maison de leurs parents (hypothèse 1.7).

Les deux derniers modèles pourraient vraisemblablement faire partie de la **déviation** par rapport aux étapes habituelles de la vie et de la multiplication des modes de vie « hybrides ». Premièrement, toutes les formes de cohabitation qui diffèrent de la formation d'un couple peuvent se retrouver assez fréquemment chez ceux qui ont quitté le toit familial : qu'il s'agisse de vivre seul ou dans un ménage avec des personnes non apparentées, dans un ménage monoparental ou encore, dans un ménage familial non traditionnel (hypothèse 2.1). Deuxièmement, il est plus fréquent que les jeunes soient à la fois des étudiants et des travailleurs à des âges plus avancés (hypothèses 2.2). Et finalement, les jeunes peuvent, dans une plus grande proportion, avoir quitté l'école et continuer néanmoins de vivre chez leurs parents : certains sont sans travail (hypothèse 2.3), tandis que les autres occupent un emploi sans pour autant avoir le sentiment qu'ils peuvent ou qu'ils devraient quitter le domicile de leurs parents (hypothèse 2.4).

Jusqu'ici nous nous sommes contentés d'expliquer la signification de la déviation d'une manière strictement descriptive, en référence à des modes de vie hybrides : quitter le foyer familial sans pour autant former un couple, assumer la situation ambiguë qui consiste à être à la fois étudiant et travailleur, habiter chez ses parents parce que l'on n'a pas trouvé un bon emploi, ou malgré que l'on en occupe un. Dans



# La jeunesse éternelle? Des changements dans les modes de vie des jeunes

DOMINIQUE MEUNIER, PAUL BERNARD ET JOHANNE BOISJOLY

Dans une mesure assez importante, les jeunes gens établissent leur mode de vie en réaction aux contraintes et aux possibilités qu'ont créées pour eux les générations précédentes. En réalité, la définition même de la jeunesse se trouve au cœur de cette relation entre les générations étant donné qu'elle détermine le meilleur mode de vie pour les gens lorsqu'ils ont un âge donné. La nature de la famille, la structure du système scolaire de même que les possibilités d'emploi sont les institutions centrales qui déterminent la transition vers l'âge adulte, et le « mode de vie » qui y est associé. Pour Galland (1985, 1993), par exemple, la jeunesse représente le processus d'établissement dans la société, processus par lequel les personnes évoluent de la dépendance de l'enfance jusqu'à diverses formes d'autonomie à l'âge adulte : ce processus exige que l'on quitte la famille d'origine et que l'on forme un couple, après avoir franchi l'étape préparatoire des études et acquis une relative indépendance sur le plan des moyens de subsistance. Au Canada, il ne s'agit plus d'une séquence ordonnée d'événements. Les étapes durent plus longtemps, et elles se chevauchent les unes les autres : des situations qui étaient auparavant incompatibles désormais coexistent, des changements qui dans le passé étaient irréversibles ne le sont plus. Notre objectif dans le présent chapitre est d'étayer ces changements.

Bon nombre de chercheurs nord-américains ont concentré leur attention sur l'un des principaux aspects de la transition entre la jeunesse et l'âge adulte, le changement dans la propension des jeunes adultes non mariés à quitter la maison (Boyd et Pryor 1989, Boyd et Norris 1994). Goldscheider et Goldscheider (1994), toutefois, décomposent cet événement unique en trois larges avenues : formation de la famille (par le mariage, ou formation d'une famille non traditionnelle par l'entremise de la

cohabitation et de la monoparentalité), semi-indépendance (qu'il s'agisse d'être aux études ou de faire son service militaire) et indépendance non maritale (qui consiste à occuper un emploi ou simplement à vivre de façon indépendante). Cette vision est plus proche de celle de Galland, et nous l'adoptons dans le cadre du présent chapitre afin d'étudier les changements dans les modes de vie des jeunes hommes et des jeunes femmes.

Nous définissons les « modes de vie » selon trois grandes dimensions. Premièrement, les **relations de cohabitation**, qui traduisent avec quel les jeunes partagent leur vie de tous les jours. Ce partage peut signifier vivre avec ses parents, vivre en tant que couple indépendant, vivre seul ou dans un ménage avec des personnes non apparentées, dans un ménage monoparental ou encore dans un ménage familial non traditionnel. Deuxièmement, les **relations par rapport aux études**, qui peuvent exiger un investissement plus ou moins important de temps de la part des jeunes : études à plein temps ou à temps partiel ou alors cessation de la poursuite des études. Et finalement, **relations par rapport au travail rémunéré**, comportant divers niveaux et diverses formes de participation : à l'extérieur de la population active, en chômage durant une période plus ou moins longue, occupant un emploi à temps partiel ou à temps plein. Nous offrons une description des changements qui prennent place dans les modes de vie de diverses cohortes de jeunes Canadiens au cours des années 1980, nous concentrant sur trois modèles assez larges : [1] le report, selon lequel on accède à un mode de vie autonome plus tard au cours de l'existence; [2] la déviation par rapport à la norme, selon laquelle diverses situations transitoires deviennent plus courantes; et [3] l'atténuation des différences entre les hommes et les femmes.



- NEWACHECK, P.W., D.C. HUGHES et J.J. STODDARD (1995). « Children's Access to Primary Care: Differences by Race, Income, and Insurance Status. » *Pediatrics*. Vol. 97, 27-32.
- NEWACHECK P.W. et N. Halfon (1988). « Preventive Care Used by School Aged Children : Differences by Socioeconomic Status. » *Pediatrics*. 76:1000-1003.
- NEWACHECK P.W. et B. STARFIELD (1988). « Morbidity and Use of Ambulatory Services Among Poor and Non-poor Children. » *American Journal of Public Health*. Vol. 78, 927-933.
- NORDSTROM M.J., S. CNATTINGIUS et B. HAGLUND (1993). « Social Differences in Swedish Infant Mortality by Cause of Death, 1983-1986. » *American Journal of Public Health*. Vol. 83, 26-30.
- PAPPAS G, S. QUEEN, W. HADDEN et G. FISHER (1993). « The Increasing Disparity in Mortality between Socioeconomic Groups in the United States, 1960 and 1986. » *New England Journal of Medicine*. Vol. 329, 103-09.
- PILL R., T.J. PETERS et M.R. ROBLING (1995). « Social Class and Preventive Health Behaviour: A British Example. » *Journal of Epidemiology and Community Health*. Vol.49, 28-32.
- REDMAN S., P. BOOTH, H. SMYTH et C. PAUL (1992). « Preventive Health Behaviours among Parents of Infants Aged Four Months. » *Australian Journal of Public Health*. Vol. 16, 175-81.
- ROBERTS I., R. NORTON et B. TAVA (1996). « Child Pedestrian Injury Rates: The Importance of Exposure to Risk' Relating to Socioeconomic and Ethnic Differences in Auckland, New Zealand. » *Journal of Epidemiology and Community Health*. Vol. 50, 162-65.
- SINGH G.K. et S.M. YU (1995). « Infant Mortality in the United States: Trends, Differentials, and Projections, 1950 through 2010. » *American Journal of Public Health*. Vol. 85, 957-64.
- SCHWARTZ J.E., H.S. FRIEDMAN, J.S. TUCKER, C. TOMLINSON-KEASEY, D.L. WINGARD et M.H. CRIQUI (1995). « Sociodemographic and Psychosocial Factors in Childhood as Predictors of Adult Mortality. » *American Journal of Public Health*. Vol. 85, 1237-45.
- STARFIELD, B. (1992). « Effects of Poverty on Health Status. » *Bulletin of the New York Academy of Medicine*. Vol. 68, 17-27.
- STARFIELD B., S. SHAPIRO et J. WEISS (1991). « Race, Family Income and Low Birth Weight. » *America Journal of Epidemiology*. Vol. 34, 1167-74.
- STARFIELD B. (1989). « Child Health Care and Social Factors: Poverty, Class, Race. » *Bulletin of the New York Academy of Medicine*. Vol. 65, 299-306.
- VICTORA C.G., S.C. FUCHS, J.A.C. FLORES, W. FONSECA et B. KIRKWOOD (1994). « Risk Factors among Children in a Brazilian Metropolitan Area. » *Pediatrics*. Vol. 93, 977-85.
- WILLIAMS I.T, J.D. MILTON, J.B. FARELL et N.M.H. GRAHAM (1995). « Interaction of Socioeconomic Status and Provider Practice as Predictors of Immunization Coverage in Virginia Children. » *Pediatrics*. Vol. 96; 439-45.
- WILLIAMS D.R. (1990). « Socioeconomic Differentials in Health : A Review and Redirection. » *Social Psychology Quarterly*. 53(2): 81-99.

HERTZMAN C. (1993). « The Lifetime Impact of Childhood Experiences: A Population Health Perspective. » 11<sup>th</sup> Honda Foundation Discoveries Symposium: Prosperity, Health and Well-Being. Toronto: Canadian Institute for Advanced Research.

HERTZIG M.E. (1992). « Mental Health Problems and Developmental Problems of Children in Poverty. » *Bulletin of the New York Academy of Medicine*. Vol. 68, 25-30.

HOULE C., J.M. BERTHELOT, P. DAVID, C. MUSTARD, L. ROOS et M.C. WOLFFSON (1996). « Le projet d'appariement du Recensement et des fichiers de soins de santé du Manitoba : Composante des ménages privés. » Ottawa: Statistique Canada, Direction des études analytiques, document de recherche n° 91.

HOUSE J.S., R.C. KESSLER et A.R. HERZOG (1990). « Age, Socioeconomic Status, and Health. » *Milbank Quarterly*. Vol. 68, 383-411.

KATZ S., R.W. ARMSTRONG et P. LOGGERFO (1994). « The Adequacy of Prenatal Care and Incidence of Low Birth Weight among the Poor in Washington State and British Columbia. » *American Journal of Public Health*. Vol. 84, 986-91.

KLEINMAN J.C., M. GOLD et D. MAKUC (1981). « Use of Health Care Services by the Poor: Another Look at Equity. » *Medical Care*. Vol. 29, 1011.

LUMLEY J., J.F. CORREY, N.M. NEWMAN et J.T. CURRANT (1985). « Low Birth Weight in Socioeconomic Status. The Effects of Tasmanian 1975-1983: *Australian Pediatric Journal*. Vol. 21, 13-14.

LUMLEY J., J.F. CORREY, N.M. NEWMAN et J.T. CURRANT (1985). « Cigarette Smoking, Alcohol Consumption and Fetal Outcomes in Tasmania 1981-1982. » *Australian and New Zealand Journal of Obstetrics and Gynecology*. Vol. 25, 33-40.

LUMLEY L.H. et S.A. REIJNEVELD (1995). « Perinatal Mortality in a First Generation Immigrant Population and its Relationship to Unemployment in the Netherlands. » *Journal of Epidemiology and Community Health*. Vol. 49, 454-59.

MACKENBACH J.P., H. Van de MHEEN et K. STRONKS (1994). « A Prospective Cohort Study Investigating the Explanation of Socio-economic Inequalities in Health in the Netherlands. » *Social Science and Medicine*. Vol. 38, 299-308.

MACKENBACH J.P. (1992). « Socio-economic Health Differences in the Netherlands: A Review of Recent Empirical Findings. » *Social Sciences and Medicine*. Vol. 34, 213-26.

MARGOLIS P.A., R.A. GREENBERG, L.L. KEYS, L.M. LAVANGE, R.S. CHAPMAN, F.W. DENNY, K.E. BAUMAN et B.W. BOAT (1992). « Lower Respiratory Illness in Infants and Low Socioeconomic Status. » *American Journal of Public Health*. Vol. 82, 1119-26.

MARMOT M.G., M. KOGEVINAS et M.A. ELSTON (1987). « Social/Economic Status and Disease. » *Annual Review of Public Health*. Vol. 8, 111-35.

MORRISON J., J.M. NAJMAN et G.M. WILLIAMS (1989). « Socioeconomic Status and Pregnancy Outcomes: An Australian Study. » *British Journal of Obstetrics and Gynecology*. Vol. 96, 298-307.

MUSTARD C.A., S. DERKSEN, J.M. BERTHELOT, M.C. WOLFFSON, L.L. ROOS et K.C. CARRIERE (1995). *Socioeconomic Gradients in Mortality and the Use of Health Care Services at Different Stages in the Life Course*. Winnipeg, Manitoba: Manitoba Centre for Health Policy and Evaluation.

MUSTARD C.A. et N. ROOS (1994). « The Relationship of Prenatal Care and Pregnancy Complications to Birth Weight in Winnipeg, Canada. » *American Journal of Public Health*. Vol. 84, 1450-57.

NAVARRO-RUBIO M., A.J. JOVEL et E.L. SCHOR (1995). « Socioeconomic Status and Preventive-Health Care Use by Children in Spain. » *American Journal of Preventive Medicine*. Vol. 11, 256-62.

NELSON M.D. (1992). « Socioeconomic Status and Childhood Mortality in North Carolina. » *American Journal of Public Health*. Vol. 82, 1131-33.

NERESIAN, W.S. (1988). « Infant Mortality in Socially Vulnerable Populations. » *Annual Review of Public Health*. Vol. 9, 361-67.

## Notes

Les auteurs aimeraient remercier Shelley Dersken, Geoff Dougherty, Michael Wolfson et deux examinateurs anonymes, pour leurs commentaires sur une version antérieure. Ils tiennent toutefois à préciser que la responsabilité finale de l'analyse leur incombe et que les opinions exprimées n'engagent ni Statistique Canada, ni le Centre manitobain des politiques et d'évaluation en matière de santé.

<sup>1</sup> Voir par exemple Adler et coll. (1994), Mackenbach (1992), House et coll. (1990), Marmot et coll. (1987) et Mustard et coll. (1995).  
<sup>2</sup> Pour des études sur le lien avec le faible poids à la naissance, voir Katz et coll. 1994, Mustard et Roos, 1994, Starfield 1992; pour leur part, Lumey et Reijneveld 1995, Singh et Yu 1995, Nordstrom et coll. 1993, Nelson 1992 et Neresian 1988 traitent du lien avec la mortalité, alors que Roberts et coll. 1996, Durkin et coll. 1994, Victora et coll. 1994, Hertzig 1992, Margolis et coll. 1992 et Starfield 1992 examinent le lien avec la morbidité. Enfin, Gortmaker et coll. 1990 présentent des données qui établissent un lien avec les problèmes de comportement.

<sup>3</sup> Plus de détails sont disponibles auprès des auteurs, sur demande.

<sup>4</sup> Il est à noter que notre analyse sur les hospitalisations inclut les admissions dans les postes de soins infirmiers, lesquelles représentent environ 5 % de toutes les admissions. Les postes de soins infirmiers sont situés dans les communautés éloignées du Nord et les traitements aux enfants qui y sont dispensés peuvent différer de ceux offerts dans un hôpital. Nous avons repris l'analyse, cette fois-ci en excluant les postes de soins infirmiers, et les conclusions n'ont pas changé.

<sup>5</sup> Ces différences sont statistiquement significatives. Il est possible d'obtenir plus de détails à ce sujet auprès des auteurs.

<sup>6</sup> Nous avons également fait l'analyse en utilisant des mesures continues du revenu et du niveau de scolarité, plutôt que les niveaux discrets indiqués au tableau 9.3, et les résultats ont été les mêmes (ceux-ci peuvent être obtenus en contactant les auteurs).

## Bibliographie

- ADLER N.E., W.T. BOYCE, M.A. CHESNEY, S. COHEN, S. FOLMAN, R.L. KAHN et L. SYME (1994). « Socioeconomic Status and Health: The Challenge of the Gradient. » *American Psychologist*. Vol. 49, 15-24.
- ADLER N.E., W.T. BOYCE, M.A. CHESNEY, S. FOLMAN et L. SYME (1993). « Socioeconomic Inequalities in Health: No Easy Solution. » *Journal of the American Medical Association*. Vol. 269, 3140-45.
- BELL R. et J. LUMLEY (1992). « Low Birthweight et Socioeconomic Status: Victoria, 1982-1996. » *Australian Journal of Public Health*. Vol. 16, 15-19.
- BLANE D. (1995). « Social Determinants of Health-Socioeconomic Status, Social Class, and Ethnicity. » *American Journal of Public Health*. Vol. 85, 903-904.
- DAVID P., J.M. BERTHELOT et C. MUSTARD (1993). « L'appariement de données échantillonnelles et administratives en vue d'étudier les déterminants de la santé. » Ottawa: Statistique Canada, Direction des études analytiques, document de recherche n° 58.
- DURKIN M.S., L.L. DAVIDSON, L. KUHN, L. P. O'CONNOR et B. BARLOW (1994). « Low Income Neighborhoods and the Risk of Severe Pediatric Injury. » *American Journal of Public Health*. Vol. 84, 587-592.
- EGBUNO L. et B. STARFIELD (1982). « Child Health and Social Status. » *Pediatrics*. Vol. 69, 550.
- FEINSTEIN J.S. (1993). « The Relationship between Socioeconomic Status and Health: A Review of the Literature. » *The Milbank Quarterly*. Vol. 71, 279-321.
- GAZMARARIAN J.A., M.M. ADAMS et E. R. PAMUK (1996). « Associations between Measures of Socioeconomic Status and Maternal Health Behavior. » *American Journal of Preventive Medicine*. Vol. 12, 108-115.
- GORTMAKER S.L., D.K. WALKER, M. WEITZMAN et A.M. SOBAL (1990). « Chronic Conditions, Socioeconomic Risk, and Behavioral Problems in Children and Adolescents. » *Pediatrics*. Vol. 85, 267-276.



D'autres études s'intéressant au lien entre le revenu et l'utilisation des soins de santé ont donné des résultats similaires aux nôtres : l'utilisation des services de soins préventifs a tendance à être moins répandue chez les enfants pauvres qui, par contre, affichent des taux plus élevés d'hospitalisation et d'utilisation de soins d'urgence (Navarro-Rubio et coll., 1995; Williams et coll., 1995; Egguono et Starfield, 1982; Kleinman et coll., 1981). La plupart des études qui ont été menées ont porté sur des systèmes de soins médicaux privés; cependant, au moins une autre étude, outre la nôtre, a examiné le statut socio-économique et l'utilisation des soins préventifs dans le cadre d'un régime national de soins de santé. S'appuyant sur des données d'enquête pour l'Espagne, Navarro-Rubio et coll. (1995) ont constaté qu'il y avait un lien positif entre l'utilisation des soins préventifs chez les enfants et la situation socio-économique de la famille. Ces auteurs ont ainsi observé une forte relation entre le niveau de scolarité et le revenu ainsi que les soins préventifs. En d'autres mots, même si les effets attribuables à la situation socio-économique sont plus prononcés aux niveaux inférieurs, ces effets persistent à tous les niveaux. Dans notre analyse, nous n'avons observé pareille relation qu'avec le revenu. La présence d'un gradient du revenu laisse croire que la couverture par un régime d'assurance n'est pas le seul déterminant des différences observées entre l'état de santé des bébés.

Il s'impose toutefois de faire preuve de prudence lors de l'utilisation de quartiles pour le revenu et le niveau de scolarité. Certains pourraient par exemple prétendre que l'utilisation de quartiles se traduit par une perte d'information. Notre conclusion selon laquelle il n'existe des différences que pour les nourrissons du quartile de scolarité le plus bas laisse entrevoir la possibilité que ce quartile se compose de sous-ensembles de nourrissons à risques extrêmement élevés de faible utilisation de soins préventifs et d'usage élevé de soins curatifs. Une ventilation plus détaillée fournirait sans doute plus d'information sur le lien observé, mais la taille de notre échantillon ne nous permet pas de faire une telle ventilation.

Il semble que les expériences vécues durant l'enfance ont une incidence sur les résultats observés plus tard durant la vie, mais on ne s'en rend sur les mécanismes qui seraient en cause. Selon deux modèles explicatifs décrits par Hertzman (1993), les expériences durant l'enfance pourraient : [1] agir durant une période critique (tôt durant la vie) pendant laquelle la personne est sensible à des événements sporadiques

Enfin, nos conclusions sur les coûts des soins de santé semblent indiquer que les coûts imputables à l'utilisation des soins de santé sont plus élevés dans les deux quartiles inférieurs de revenu et le quartile inférieur de scolarité. Les dépenses plus élevées observées dans les groupes de plus faible statut socio-économique sont attribuables principalement aux frais d'hospitalisation. La méthode que nous avons utilisée pour établir les coûts d'hospitalisation est basée sur les coûts par jour, et non par cas. Or une telle méthode peut surestimer les coûts d'hospitalisation pour les nourrissons qui sont hospitalisés plus longtemps—un profil qui ressort plus souvent dans les quartiles inférieurs. Nous examinons également les causes de l'hospitalisation, lesquelles peuvent être associées à des coûts relativement plus élevés ou plus faibles. Nous utilisons toutefois le coût d'hospitalisation spécifique (c'est-à-dire par hôpital)—et non global—par jour. Nos conclusions indiquent que les coûts relatifs par quartile se traduisent par des différences significatives en termes de dépenses. Par contre, la forte utilisation des services de prévention dans les quartiles supérieurs se traduit par des différences négligeables au niveau des dépenses. Si l'on considère que les soins préventifs réduisent les besoins en soins curatifs, la répartition uniforme des soins préventifs pourrait s'avérer une approche médicale rentable.

Il serait possible de pousser cette analyse plus loin. Ainsi, l'utilisation d'un échantillon de plus grande taille permettrait d'obtenir une ventilation plus détaillée que le quartile qui représente le plus faible statut socio-économique, un groupe susceptible de compter des sujets à risques extrêmement élevés de forte utilisation de soins curatifs et de faible utilisation de soins préventifs. Une analyse plus détaillée pourrait également porter sur la répartition des facteurs de risque comportementaux et matériels entre les quartiles, afin de vérifier l'hypothèse voulant que les différences dans l'utilisation des soins de santé durant la première année de vie sont imputables à des différences dans la distribution des facteurs de risque entre les groupes socio-économiques.

réflètent différents mécanismes par lesquels les facteurs sociaux pourraient influencer sur la santé et les comportements en matière de santé.

Diverses hypothèses ont été proposées pour expliquer la relation entre le statut socio-économique et la santé (Adler et coll., 1994; Marmot et coll., 1987). L'une de ces hypothèses est celle de la « sélection », selon laquelle la direction du lien de causalité va de l'état de santé à la situation socio-économique (Mackenbach et coll., 1994). Notre recherche ne peut corroborer cette hypothèse, car l'état de santé des nourrissons est examiné ici en regard de données socio-économiques obtenues avant leur naissance. Par conséquent, les relations observées entre le revenu et la scolarité, d'une part, et l'utilisation des soins de santé, d'autre part, peuvent être considérées causales, mais la direction de ce lien de cause à effet va du statut socio-économique à l'utilisation des soins de santé, et non dans la direction inverse.

Une autre hypothèse est celle selon laquelle la situation socio-économique influencerait sur les fonctions biologiques lesquelles, à leur tour, auraient une incidence sur l'état de santé. Cependant, selon Adler et coll. (1994), on en connaît peu sur les fondements de cette hypothèse, car les composantes du statut socio-économique — à savoir le revenu, la scolarité et la profession — interagissent sur les aspects essentiels de la vie. Ces auteurs illustrent leurs propos au moyen de quatre domaines de vie, soit : [1] le milieu physique dans lequel vit une personne et les expositions à des agents pathogènes et cancérogènes et autres risques environnementaux qu'il y sont associées; [2] le milieu social, incluant l'accès aux ressources sociales et le niveau de soutien; [3] la socialisation et les expériences et [4] les comportements en matière de santé. À l'intérieur de tous ces domaines, un grand nombre de variables précises peuvent influencer sur la relation entre le statut socio-économique et la santé.

Dans la présente analyse, l'utilisation du revenu et du niveau de scolarité s'est avérée utile pour comprendre la relation entre l'utilisation des soins de santé durant la première année de vie et le statut socio-économique. Plusieurs chercheurs ont regroupé en deux catégories (facteurs de risque matériels et facteurs de risque comportementaux) les facteurs de risque sous-jacents qui sont associés aux différences dans l'état de santé. Les facteurs de risque matériels incluent les ressources financières nécessaires

à l'achat des biens et services essentiels (conditions de vie et logement adéquats) pour atteindre et maintenir une bonne santé (Mackenbach et coll., 1994; Feinstein, 1993). Les facteurs de risque comportementaux reflètent pour leur part l'environnement social d'une personne; ces facteurs sont définis, selon Feinstein (1993, p. 307), comme les caractéristiques personnelles qui ne requièrent pas nécessairement l'affectation de plus de ressources financières ou qui ne peuvent être achetées directement avec de l'argent, mais qui sont néanmoins importantes pour être en bonne santé. Les chercheurs ne s'entendent pas sur l'importance relative des facteurs comportementaux et des facteurs matériels, pour expliquer les inégalités en matière de santé. Cependant, si l'on considère que le revenu est une variable de remplacement pour les facteurs de risque matériels et que le niveau de scolarité sert de variable de remplacement pour les facteurs comportementaux, il semble que nos résultats démontrent que ces derniers ont un effet prédominant sur l'utilisation des soins de santé.

Le fait de connaître la façon dont le revenu et la scolarité exercent leur influence faciliterait l'élaboration d'interventions appropriées auprès des sous-populations concernées (Gazmararian et coll., 1996). Il se peut que l'effet de la scolarité s'exerce par le biais de comportements particuliers associés à la fois à des conséquences néfastes et à la scolarité. Notre analyse est incapable, par exemple, d'ajuster les modèles pour tenir compte de l'effet du tabagisme chez la mère, un facteur connu pour augmenter le risque de faible poids à la naissance et de problèmes respiratoires infantiles (Bell et Lumley, 1992; Redman et coll., 1992; Lumley et coll., 1985; Morrison et coll., 1989).

L'effet de la scolarité pourrait également s'exercer par le biais de comportements favorables à la santé. D'autres ont ainsi observé un lien entre la scolarité et les soins préventifs. Redman et coll. (1992), par exemple, ont examiné la relation entre six pratiques de santé préventives dirigées vers les nourrissons et les variables démographiques familiales et ils ont constaté que les mères qui n'adoptent pas de telles mesures sont plus susceptibles d'être moins instruites. Comme nous avons observé un effet de seuil, l'établissement d'un profil des facteurs comportementaux — autant néfastes que favorables pour la santé — chez les bébés du quartier de scolarité le plus bas et des autres quartiles pourrait permettre de mieux comprendre les mécanismes sous-jacents par lesquels s'exerce l'effet du niveau de scolarité.



Tableau 9.4  
Coûts moyens de l'utilisation de soins de santé par année-personne, selon le type de soins et le statut socio-économique (dollars de 1986)

Coût total	Soins ambulatoires		Soins hospitaliers		Quartile du revenu du ménage (coûts par personne, dollars de 1986)	Intérieur	Deuxième	Troisième	Supérieur	Quartile du niveau de scolarité de la mère	Intérieur	Deuxième	Troisième	Supérieur	
	Curatifs	Préventifs	Frais d'hospita- lisation	Frais médicaux											
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 264	69	267	77	45	201	87	564	1 223	76	258	79	55	222	80	718
1 26															

lien positif entre les coûts des soins préventifs et le statut socio-économique, les coûts par année-personne augmentant parallèlement avec le re-

### 3. Conclusion

Ce chapitre vient étayer des études sur le lien entre le statut socio-économique et la santé, en présentant une analyse sur la relation qui existe entre l'utilisation des soins médicaux hospitaliers et ambulatoires durant la première année de vie et des mesures non écologiques du revenu et de la scolarité. Lorsque nous examinons le revenu et le niveau de scolarité séparément, nous constatons : [1] que les bébés dont les parents ont un faible niveau de scolarité présentent un plus haut risque d'hospitalisation et de soins curatifs fréquents, alors qu'ils reçoivent moins de soins préventifs, et [2] que le niveau de scolarité influe davantage que le revenu sur le risque d'hospitalisation et sur l'utilisation des soins préventifs. Cependant, lorsqu'on tient compte simultanément de l'effet du revenu, du niveau de scolarité, de l'âge de la mère et du faible poids à la naissance, alors l'effet du revenu sur le risque d'hospitalisation diminue, de même que l'effet du niveau de scolarité sur la probabilité de soins curatifs fréquents. Notre analyse porte à croire que ces mesures traduisent différentes dimensions du contexte socio-économique et il est probable que le revenu et le niveau de scolarité



Hospitalisations et soins ambulatoires, selon le statut socio-économique : estimations de régression logistique des risques relatifs

Hospitalisations			Soins ambulatoires curatifs -			Soins ambulatoires préventifs -		
Niveau de risque	relatif	signification marginal	Niveau de risque	relatif	signification marginal	Niveau de risque	relatif	signification marginal

A. Modèle non corrigé

Quartile inférieur de revenu	1,99	0,0002	1,50	0,007	0,59
Deuxième quartile de revenu	1,45	0,06	1,40	0,03	0,82
Troisième quartile de revenu	1,26	0,25	1,09	0,58	0,73
Quartile inférieur de scolarité	2,59	0,0001	1,48	0,009	0,54
Deuxième quartile de scolarité	1,13	0,54	1,33	0,06	0,88
Troisième quartile de scolarité	0,96	0,85	1,32	0,07	0,89

B. Modèle corrigé

Quartile inférieur de revenu	1,34	0,15	1,36	0,05	0,69
Deuxième quartile de revenu	1,12	0,58	1,29	0,11	0,89
Troisième quartile de revenu	1,12	0,58	1,06	0,71	0,76
Quartile inférieur de scolarité	1,95	0,0006	1,27	0,16	0,59
Deuxième quartile de scolarité	0,98	0,92	1,23	0,19	0,93
Troisième quartile de scolarité	0,87	0,52	1,28	0,12	0,91
Faible poids à la naissance	2,95	0,0001	2,45	0,0001	0,87
Âge de la mère	0,96	0,007	0,99	0,71	1,00

Nota : Le modèle non corrigé fait référence à des modèles distincts dans lesquels seul le revenu, ou seul le niveau de scolarité, est utilisé. Le modèle corrigé fait référence à un modèle où le revenu et le niveau de scolarité figurent simultanément, avec le faible poids à la naissance et l'âge de la mère.

Soins ambulatoires

La presque totalité des bébés reçoivent des soins axés sur le traitement durant leur première année de vie et il n'existe ici aucun lien significatif avec le statut socio-économique (tableau 9.2, volet B). Il existe en revanche une relation inverse entre le statut socio-économique et une fréquence élevée de consultations. Dans le cas du revenu, il semble y avoir un effet de seuil qui sépare les deux quartiles inférieurs des deux quartiles supérieurs. En ce qui a trait à la scolarité, le quartile supérieur est associé à un taux moins élevé de consultations, alors que les taux sont similaires dans les autres quartiles.

Lorsqu'ils sont examinés séparément, le revenu et la scolarité sont tous deux liés de façon significative à une « fréquence élevée de soins » ambulatoires. Les bébés à plus hauts risques de traitements sont ainsi ceux qui se trouvent dans les deux quartiles inférieurs de revenu et dans le quartile inférieur de scolarité. Cependant,

lorsque toutes les variables sont incluses dans un modèle de régression, le lien significatif entre la scolarité et la fréquence élevée de traitement disparaît (tableau 9.3).

Il existe par ailleurs un lien positif entre les soins ambulatoires préventifs et le statut socio-économique. C'est ainsi que le pourcentage de bébés qui ont au moins une consultation préventive durant leur première année de vie augmente proportionnellement avec le revenu (tableau 9.2). La fréquence élevée de consultations à caractère préventif (cinq ou plus) est également plus répandue chez les enfants se situant dans les catégories supérieures de revenu et de scolarité. Ce lien positif entre, d'une part, le revenu et la scolarité et, d'autre part, les soins ambulatoires préventifs persiste, même lorsqu'on tient compte de l'effet du faible poids à la naissance et de l'âge de la mère (tableau 9.3). La probabilité de consultations préventives fréquentes chez les bébés du quartile de revenu le plus bas n'est que de 69 % de celle pour les bébés du quartile

Tableau 9.2

Hospitalisations et soins ambulatoires durant la première année de vie, selon le statut socio-économique

Quartile	Deuxième	Troisième	Quartile
Quartile	supérieur		

(pour 1 000 bébés)

A. Hospitalisations			
Revenu	19,8*	15,4*	13,7*
Au moins une visite	5,3*	5,4*	4,1*
Deux visites ou plus			
Scolarité	24,9*	12,8*	11,2*
Au moins une visite	8,0*	3,7*	2,0*
Deux visites ou plus			

B. Utilisation des soins ambulatoires curatifs			
Revenu	96,0	95,8	95,8
Au moins une consultation	29,1	27,9	23,1
Consultations fréquentes <sup>1</sup>			
Scolarité	93,2	96,8	96,1
Au moins une consultation	28,4*	26,4*	26,2*
Consultations fréquentes <sup>1</sup>			

C. Utilisation des soins ambulatoires préventifs			
Revenu	89,2*	93,2*	94,2*
Au moins une consultation	21,6	27,4	25,4
Consultations fréquentes <sup>2</sup>			
Scolarité	86,7*	94,5*	97,2*
Au moins une consultation	18,9*	27,9*	28,1*
Consultations fréquentes <sup>2</sup>			

<sup>1</sup> Dix consultations ou plus

<sup>2</sup> Cinq consultations ou plus

\* Indique qu'il existe une différence significative entre les éléments de la rangée au niveau de signification de 0,05.

Ombrage indique qu'il existe une différence significative entre les éléments de la rangée au niveau de signification de 0,01.

Gras indique qu'il existe une différence significative entre les éléments de la rangée au niveau de signification de 0,001.

Gras\* indique qu'il existe une différence significative entre les éléments de la rangée au niveau de signification de 0,001.

Nous avons également procédé à une analyse multivariée, qui tient compte simultanément de l'effet du revenu, de la scolarité, du faible poids à la naissance et de l'âge de la mère sur la probabilité qu'une ou plusieurs hospitalisations surviennent durant la première année de vie; cette analyse a été faite par régression logistique. Deux modèles distincts ont été utilisés pour les estimations: dans le premier, le revenu et le niveau de scolarité ont été examinés indépendamment des autres facteurs (il s'agit du modèle non corrigé, au tableau 9.3); dans le deuxième, l'effet de ces facteurs et des autres a été pris en compte simultanément (modèle corrigé, au tableau 9.3).<sup>6</sup> Lorsque le revenu et la scolarité sont examinés séparément, nous observons une relation positive entre ces variables et la probabilité d'une ou de plusieurs hospitalisations durant la première année de vie, l'effet de la scolarité étant par

ailleurs plus marqué. Ainsi, la probabilité d'hospitalisation est maximale chez les enfants qui se situent dans le quartile le plus bas pour ce qui est du revenu familial et du niveau de scolarité de la mère. À titre d'exemple, les bébés nés de parents dans le quartile inférieur de revenu sont 1,99 fois plus susceptibles d'être hospitalisés au moins une fois que ceux nés de parents dans le quartile supérieur; de même, les bébés nés de mères qui se situent dans le quartile inférieur de scolarité sont 2,59 fois plus susceptibles d'être hospitalisés que ceux du quartile supérieur. Cependant, lorsqu'on tient compte également de l'effet du faible poids à la naissance, de l'âge de la mère et de l'autre mesure du statut socio-économique, un lien significatif persiste entre la probabilité d'une ou de plusieurs hospitalisations et la scolarité, mais non avec le revenu (comme l'indiquent les données des première et deuxième colonnes du tableau 9.3).

Tableau 9.1  
Revenu du ménage, niveau de scolarité de la mère et événements liés à la naissance

Durée moyenne d'hospitalisation	Faible poids à la naissance (moins de 2 500 grammes)	Courte période de gestation (moins de 37 semaines)	A. Revenu du ménage (Quartile)			
			(pour 1 000 naissances)			
			Inférieur	69	59	4,9
			Deuxième	66	52	4,8
			Troisième	43	26	4,4
			Supérieur	42	21	4,5
			B. Niveau de scolarité de la mère (Quartile)			
			Inférieur	78	63	4,6
			Deuxième	60	49	5,1
			Troisième	47	29	4,6
			Supérieur	36	38	4,4

Il existe un lien négatif significatif entre, d'une part, le revenu et le niveau de scolarité et, d'autre part, une courte période de gestation. La probabilité que les enfants naissent après une courte période de gestation est ainsi deux fois plus élevée chez les parents qui se situent dans le quartile inférieur de scolarité que chez ceux du quartile supérieur (voir tableau 9.1). Une relation similaire existe en regard du faible poids à la naissance : la probabilité de faible poids à la naissance est ainsi moins élevée chez les personnes plus instruites ou à revenu plus élevé.

Par ailleurs, la durée moyenne d'hospitalisation à la naissance est légèrement plus longue pour les personnes se situant dans les quartiles inférieurs de revenu et de scolarité, bien que la différence entre les moyennes des quartiles supérieur et inférieur, selon le test t, ne soit pas statistiquement significative.

Dans l'ensemble, des diagnostics associés à la période de gestation ou à la naissance ont été posés chez 41,6 % des nouveau-nés. La morbidité périnatale représente la majorité des diagnostics déclarés (87,6 %), suivie des anomalies congénitales (10,7 %)<sup>3</sup>. Aucune différence significative n'a été observée entre les catégories de scolarité et de revenu, quant au pourcentage de nourrissons présentant une morbidité. (Une morbidité a été observée dans quelque 40 % des naissances, tous quartiles de revenu et de scolarité confondus.)

Les nourrissons faisant partie des groupes les moins favorisés selon le statut socio-économique passent également plus de jours à l'hôpital durant leur première année de vie. Parmi les bébés qui ont été hospitalisés, ceux du quartile inférieur de revenu l'ont été en moyenne pendant 8,5 jours, comparativement à 4,5 jours pour ceux du quartile de revenu supérieur. De même, les bébés se situant dans le quartile inférieur, selon le niveau de scolarité, ont été hospitalisés en moyenne 9,4 jours, contre 5,8 jours pour ceux du quartile supérieur<sup>4</sup>.



jours et tous les séjours de plus de 60 jours ont été inclus dans cette catégorie maximale. Les **consultations pour soins ambulatoires curatifs** font référence aux soins dispensés pour le traitement d'une maladie ou d'une affection aiguë ou chronique. « Fréquence élevée de traitement » fait référence à une fréquence qui se situe dans le quart supérieur du nombre de consultations, d'après la distribution statistique pondérée; dans le cas des soins ambulatoires curatifs, cette fréquence correspond à 10 consultations ou plus durant l'année. Enfin, les **consultations pour soins ambulatoires préventifs** font référence à tout type de soins reçus dans le but premier de prévenir une maladie ou de promouvoir la santé. Les consultations suivantes—définies selon l'information fournie par les médecins—sont considérées de type préventif : surveillance de la santé d'un nourrisson ou d'un enfant; examen médical général et immunisation et vaccination. Les soins préventifs à fréquence élevée désignent ceux qui, par leur nombre, se situent dans le quart supérieur des consultations; d'après la distribution statistique pondérée, cette fréquence équivaut à cinq consultations ou plus durant l'année. (Toutes les analyses sont basées sur des données pondérées reflétant le plan d'échantillonnage complexe représentant les nourrissons qui vivaient au Manitoba le jour du Recensement de 1986.)

Les frais d'hospitalisation ont été calculés en multipliant les coûts d'hospitalisation quotidiens par la durée d'hospitalisation. Les coûts d'hospitalisation quotidiens (pour l'exercice financier 1991-1992) ont été obtenus du système d'information sur la santé de la population du Centre manitobain des politiques et d'évaluation en matière de santé. Les coûts des soins ambulatoires ont été établis à partir du barème des honoraires prévu dans le Régime d'assurance-maladie du Manitoba, pour les services dispensés par les médecins, et ils incluent les coûts des analyses de laboratoire et des tests d'imagerie. Tous les coûts sont exprimés en dollars de 1986, selon la composante des soins de santé de l'indice des prix à la consommation.

## 2. Résultats

Nous présentons les résultats pour quatre types d'utilisation : [1] séjours à l'hôpital résultant de la naissance; [2] séjours à l'hôpital durant la première année de vie, excluant la naissance; [3] consultations médicales pour soins ambulatoires axés sur le traitement et [4] consultations médicales pour soins ambulatoires préventifs.

Un numéro personnel et unique d'information sur la santé a été attribué à chaque bébé, pour recueillir les données sur l'utilisation des services de santé. Nous avons utilisé les dossiers sur les services de santé reçus pendant une période d'un an à partir de la date de naissance, ce qui représente au total 2 660 dossiers d'hospitalisation et 27 200 demandes de remboursement présentées par les médecins pour des soins ambulatoires (en dehors de l'hôpital).

Deux mesures du statut socio-économique, calculées à partir des données du Recensement de 1986, sont utilisées, soit : le revenu du ménage et le niveau de scolarité de la mère. Le **revenu du ménage** fait référence au revenu total de toutes les personnes de 15 ans et plus qui vivaient dans le ménage durant l'année civile 1985, ceci incluant les salaires, le revenu d'un travail autonome (agricole ou autre), les paiements de transfert du gouvernement, les revenus de placements et autres sources de revenu. La valeur obtenue a ensuite été corrigée en fonction de la taille du ménage. Le **niveau de scolarité de la mère** correspond au nombre d'années d'études et il a été obtenu en calculant le plus haut niveau atteint à l'école secondaire (1 à 13), le nombre d'années d'études universitaires ou autres études postsecondaires, ainsi que les diplômes, certificats ou autres grades obtenus. Le nombre d'années d'études varie de 0 (aucune scolarité) à 19 (niveau du doctorat).

Les trois facteurs de risque additionnels suivants ont été inclus dans l'analyse : courte période de gestation, faible poids à la naissance et âge de la mère. La période de gestation et le poids à la naissance sont indiqués sur le dossier d'hospitalisation; par « courte période de gestation », on entend une gestation inférieure à 37 semaines et « faible poids à la naissance » est défini comme un poids inférieur à 2 500 grammes. L'âge de la mère, qui est obtenu du fichier du recensement, est considéré comme une variable continue dans l'analyse.

Trois modes d'utilisation des soins de santé sont examinés dans cette analyse; il s'agit de l'hospitalisation, des consultations pour soins ambulatoires préventifs. Les **hospitalisations**, qui incluent toute admission d'au moins une journée, sont considérées comme étant toutes axées sur le traitement. Lorsqu'il y a transfert entre hôpitaux, l'admission est attribuée à l'hôpital où le patient a été admis initialement et ces transferts ne comptent que pour un séjour; enfin la durée d'hospitalisation a été limitée à 60

mettre en branle des processus néfastes pour la santé, et qui sont irréversibles même si l'on s'attaque ultérieurement à la cause initiale (Williams, 1990). Envisagé sous cet angle, le lien entre un statut socio-économique plus élevé et la santé n'est pas direct, mais plutôt lié à la prestation et à l'utilisation des soins de santé.

Au meilleur de notre connaissance, il n'existe aucune étude canadienne qui présente une vue d'ensemble complète des disparités socio-économiques dans l'utilisation des soins de santé durant l'enfance, soins incluant ici les soins hospitaliers et ambulatoires—préventifs et curatifs. Nous décrivons dans ce chapitre une analyse qui vise à combler cette lacune. Nos travaux s'appuient sur un ensemble de données unique qui permet d'examiner les effets du statut socio-économique des parents sur l'utilisation des soins de santé durant la première année de vie des enfants. Nous avons ainsi été en mesure de lier l'information socio-économique extraite du Recensement de 1986 du Canada à des données exhaustives sur l'utilisation des soins médicaux et hospitaliers dans la province du Manitoba. La présente analyse vise les deux objectifs suivants : [1] examiner les différences socio-économiques dans l'utilisation des soins de santé durant la première année de vie et [2] examiner les différences socio-économiques dans l'utilisation des soins de santé durant la première année de vie et

## 1. Méthodes

Nous avons constaté que le statut socio-économique des parents a une incidence sur l'utilisation des soins de santé durant la première année de vie et que cet effet semble davantage attribuable à la scolarité des parents qu'à leur revenu. Ainsi, les bébés nés de parents qui se situent dans le quartile inférieur de la population au plan de la scolarité ont tendance à recevoir davantage de soins curatifs et moins de soins préventifs que les bébés de parents plus instruits. Cet effet lié à l'éducation fait ressortir l'importance des facteurs comportementaux—en plus des ressources matérielles—pour expliquer les inégalités au plan de la santé durant la première année de vie.

La base de données associée au projet « Le projet d'appariement du Recensement et des fichiers de soins de santé du Manitoba » nous a servi de source d'information. La création de cette base de données est le fruit d'une collaboration entre le gouvernement du Manitoba, l'Université du

Manitoba et Statistique Canada, qui avait pour but d'évaluer les avantages analytiques du couplage entre les dossiers médicaux administratifs et les données du Recensement de 1986. Dans le cadre de ce projet, les données sur le statut socio-économique des particuliers (revenu du ménage et niveau de scolarité)—extraites du Recensement du Canada mené en juin 1986—ont été couplées à des données provenant des fichiers de données longitudinales du Régime d'assurance-maladie du Manitoba. Les données couplées consistent en des données extraites des dossiers sur les congés de l'hôpital et des demandes de remboursement des médecins du-rant les sept exercices financiers entre 1983 et 1989, auxquelles s'ajoute l'information recueillie en 1986 par le biais du formulaire détaillé du recensement (formulaire 2B). Les dossiers sur les congés de l'hôpital ont fourni les données suivantes : type de visite; codes du diagnostic primaire et des diagnostics subséquents; codes des interventions cliniques et dates d'admission à l'hôpital et de départ. Les dossiers sur les nouveau-nés contiennent en outre des données sur le poids à la naissance et la période de gestation, alors que les demandes de remboursement présentées par les médecins contiennent des informations ayant trait aux services facturables par le médecin, notamment le code de diagnostics, le code de tarification, les honoraires nets exigés pour le service et la date de prestation du service. Tous les dossiers médicaux contiennent un numéro d'identification personnel unique qui permet de lier les dossiers d'hospitalisation aux dossiers des consultations médicales, de manière à obtenir un bilan personnel complet de l'utilisation des soins de santé.

Les données couplées sont basées sur un échantillon aléatoire stratifié de 47 935 personnes réparties entre 16 627 logements privés ou collectifs représentant la population du Manitoba le 3 juin 1986, jour du recensement. Houle et coll. (1996), de même que David et coll. (1993), décrivent plus en détail les méthodes d'échantillonnage, de couplage et d'évaluation de la qualité. La présente analyse est basée sur un échantillon des bébés nés entre le 4 juin 1986 et le 31 mars 1989, de femmes faisant partie de l'échantillon des ménages privés. Sont exclus les bébés qui ont migré hors de la province durant leur première année de vie, et les résultats de la naissance ne sont indiqués que pour les bébés nés à l'hôpital. L'échantillon est composé de 1 882 bébés, lesquels ont été choisis à partir d'un fichier administratif du Manitoba qui identifie les bébés nés des femmes de l'échantillon



# Incidence de l'héritage économique et social sur l'utilisation des soins de santé durant la première année de vie

## Chapitre 9

TAMARA KNIGHTON, CHRISTIAN HOULE, JEAN-MARIE BERTHELOT ET CAM MUSTARD

Le statut socio-économique—mesuré par le revenu, la scolarité et la profession—est un phénomène complexe qui est utilisé pour décrire les iniquités sociales. Il est un fait bien connu que les personnes appartenant à des groupes socio-économiquement faibles présentent un taux de mortalité plus élevé et un état de santé plus précaire que les personnes mieux favorisées selon l'échelle sociale. C'est par ailleurs au début de la vie, puis plus tard passé la quarantaine, que les différences dans l'état de santé selon le statut socio-économique sont les plus prononcées<sup>1</sup>. Ces faits bien connus sont en revanche mal compris. Certains mettent en cause les effets de sélection, d'autres les expériences personnelles vécues à l'âge adulte ou encore les expériences au début de l'enfance (Houze et coll., 1990; Hertzman, 1993). Un des obstacles majeurs à la compréhension de ces profils vient du fait que le statut socio-économique peut être à la fois la cause et le résultat d'un mauvais état de santé; ainsi, un faible revenu peut contribuer à des conditions de vie propices à un mauvais état de santé ou, vice versa, un mauvais état de santé peut être un facteur de prédisposition à un faible revenu. De plus, bon nombre des mesures du statut socio-économique ont un fondement « écologique », c'est-à-dire qu'elles mesurent les conditions du milieu dans lequel vit la personne, plutôt que le statut socio-économique réel de la personne.

Le lien de causalité est cependant plus direct dans le cas des nourrissons. Chez les nourrissons, le statut socio-économique a une incidence sur la santé, mais un mauvais état de santé risque moins de réduire le revenu familial ou de modifier le niveau de scolarité des parents. Malgré cela, la plupart des études menées à ce jour se sont intéressées à la population adulte. Or le fait de comprendre les différences dans l'utilisation des soins de santé durant la petite enfance, selon le statut socio-économique, pourrait favoriser une meilleure compréhension des effets ou des comportements liés à la santé qui sont associés au contexte socio-économique. Ceci pourrait également permettre de mieux comprendre le lien entre les expériences vécues durant la petite enfance et les effets sur la santé qui se manifestent plus tard, durant la vie.

Il a été démontré que le revenu, la scolarité et la profession des parents ont tous une incidence sur la santé des enfants. Un lien a notamment été établi entre, d'une part, un faible statut socio-économique et, d'autre part, un faible poids à la naissance, un accroissement de la mortalité et une incidence accrue de diverses morbidités et divers problèmes de comportement<sup>2</sup>. De façon générale, les études ont cherché essentiellement à évaluer l'influence du statut socio-économique sur différentes maladies, plutôt que sur l'utilisation globale des soins de santé. Ceci s'explique notamment du fait que les différences dans l'utilisation des services de santé entre les groupes socio-économiques peuvent refléter des différences, non seulement dans l'état de santé, mais aussi dans les comportements à l'égard du système de santé.

Certaines études ont démontré que l'usage accru de soins préventifs était associé à un statut socio-économique plus élevé (Newacheck et al., 1995; Pili, Peters et Robling, 1995; Newacheck et Halfon, 1988). Les normes relatives à la pratique clinique en santé infantile préconisées non seulement le traitement des symptômes et des maladies durant la petite enfance, mais également le suivi des enfants « bien portants » (c'est-à-dire l'immunisation et le suivi du développement des nourrissons, afin de déceler toute anomalie congénitale ou anormale de croissance). Il a en effet été démontré que des soins préventifs appropriés durant la petite enfance amélioreraient l'état de santé de l'enfant, à court et à long termes (Fedman et coll., 1992). Ceci laisse sous-entendre que des soins préventifs inadéquats durant l'enfance pourraient



## Bibliographie

- BLISHEN, Bernard R., William K. CARROLL et Catherine MOORE (1987). « The 1981 Socio-Economic Index for Occupations in Canada. » *Canadian Review of Sociology and Anthropology*. Novembre 1987, Vol. 24 (4), p. 465-488.
- CENTRE CANADIEN DU MARCHÉ DU TRAVAIL ET DE LA PRODUCTIVITÉ (1993). *Sondage national sur la formation de 1991*. Ottawa.
- DE BROUCKER, Patrice (1997). « Education et formation liées à l'emploi—qui y a accès ? » *Revue trimestrielle de l'éducation*. Vol. 4, n° 1. Ottawa: Statistique Canada, n° 81-003 au catalogue.
- FOURNIER, Elaine, George BUTLIN et Philip GILES (1995). « Évolution intergénérationnelle de la scolarité des Canadiens. » *Revue trimestrielle de l'éducation*. Vol. 2, n° 2. Ottawa: Statistique Canada, n° 81-003 au catalogue.
- HIRSHHORN, Ronald (1990). « L'étude des liens entre les générations. » Conseil économique du Canada, document de travail n° 9.
- ORGANISATION DE COOPÉRATION ET DE DÉVELOPPEMENT ÉCONOMIQUES et STATISTIQUE CANADA (1995). *Littérature, économie et société : résultats de la première enquête internationale sur l'alphabétisation des adultes*. Ottawa: Statistique Canada, n° 89-545 au catalogue.
- STATISTIQUE CANADA (1996). *Lire l'avenir : un portrait de l'alphabétisme au Canada*. n° 89-551 au catalogue, Ottawa.
- ratio de femmes dans la profession. Nous avons adapté les scores de Blishen et coll. au code à 4 chiffres des professions dans la Classification (CCDO). Nous avons transposé cette classification à la Classification type des professions de 1980 (CTP) et nous avons pondéré les données sur la population active du Recensement de 1980 (CTP) selon la CTP de 1980, pour calculer le statut socio-économique au niveau du code à deux chiffres des professions (21 professions), ce qui nous a donné les résultats suivants : Directeurs, administrateurs 56,78; Sciences naturelles 61,78; Sciences sociales 56,30; Religion 50,48; Enseignement 61,61; Médecine 55,65; Arts 43,62; Commerce 37,97; Ventes 36,55; Services 29,35; Agriculture 27,16; Pêches 25,22; Foresterie 30,04; Exploitation minière 42,08; Transformation 34,25; Machinerie 41,17; Fabrication 37,94; Construction 37,75; Transports 36,56; Manutention 31,25; Autres métiers 43,04 et non précisé 29,94. Nous utilisons une classification des professions plus détaillée qu'auparavant afin d'établir une échelle de professions plus exhaustive, qui ne soit pas assujettie aux contraintes liées à l'analyse de régression.
- Malheureusement, l'échantillon est trop petit pour répéter ce tableau pour les deux cohortes séparément. Il nous est donc impossible de déterminer si l'ampleur de l'effet de la profession du père a changé au fil des ans. Les résultats de la régression, présentés aux deux sections qui précèdent, nous amènent toutefois à penser que cet effet a diminué d'une génération à l'autre.

<sup>1</sup> Ceci signifie que 17,1 % des répondants de sexe masculin ne sont pas inclus dans l'analyse. Il n'y a eu aucune imputation des données manquantes, ni reproduction des données après exclusion des observations avec données manquantes. Une annexe, disponible sur demande, présente la distribution des répondants qui ne connaissaient pas le niveau de scolarité de leurs parents et qui n'ont pas précisé leur niveau de scolarité ou celui de leurs parents.

<sup>2</sup> Ceci signifie que 303 personnes (soit 5,3 % de l'échantillon) ont été exclues. De ce nombre, 295 avaient entre 16 et 25 ans, cinq étaient âgées de 26 à 35 ans (3,5 %) et trois avaient entre 36 et 45 ans (0,5 %).

<sup>3</sup> Les données originales de l'enquête répartissent le niveau de scolarité en sept ou huit catégories. Nous avons utilisé ces catégories pour déterminer le nombre de personnes « mobiles au plan éducationnel », puis nous avons regroupé les résultats en trois niveaux de scolarité des parents, pour produire les estimations.

<sup>4</sup> La proportion croissante de personnes qui obtiennent un diplôme d'études postsecondaires est corroborée par les chiffres suivants :

Cohorte	Cohorte plus âgée	Parents de la cohorte plus âgée	Parents de la cohorte plus jeune	Proportion avec un diplôme d'un collége communautaire		Proportion avec un grade universitaire	
				9,1	5,9	14,4	15,7
22,9	15,2	11,9	14,4	16,1			

Ces chiffres sont en fait des proportions; cependant, compte tenu de la forte augmentation de la population au cours des dernières décennies, ceci signifie qu'un nombre considérable de personnes ont fréquenté des établissements d'enseignement postsecondaire et ont obtenu leur diplôme. L'augmentation de la proportion des parents dans les deux cohortes, ayant terminé des études postsecondaires, est suffisante pour expliquer la réduction du potentiel de mobilité ascendante entre les deux cohortes.

<sup>5</sup> La mesure du statut socio-économique est tirée de Blischen et coll. (1987). Dans cette étude basée sur le Recensement de 1981, le statut socio-économique a été calculé pour chaque profession, en regard des trois variables suivantes : le niveau de scolarité, le revenu et le

l'alphabétisme, qui constituent une importante variable prédictive de la participation aux programmes d'éducation permanente et de formation continue. [7] Outre les études, l'expérience acquise au travail dans certaines professions peut également contribuer largement à la transmission du capital intellectuel. [8] Les capacités de lecture améliorent également la capacité d'une personne de gravir les échelons professionnels. [9] Les stratégies adoptées par les parents pour favoriser les études reflètent leurs propres antécédents scolaires et leur besoin de transmettre leurs connaissances et leur savoir à leur enfants. Les parents plus instruits adoptent plus souvent des stratégies favorables au succès de leurs enfants, que les parents moins instruits.

La famille constitue, il est certain, un lieu essentiel pour la transmission du capital intellectuel. La famille peut nourrir les espoirs chez certains, mais elle peut aussi perpétuer les iniquités intergénérationnelles. Le système d'éducation est-il en mesure de fournir les possibilités d'éducation dont un si grand nombre ont besoin? Le système d'éducation peut-il fournir des possibilités égales pour tous? Un vaste éventail de politiques gouvernementales touchent des questions qui ont trait à l'importance du capital humain pour le développement de notre société et le succès de notre économie : que l'on pense à l'information et au counselling reliés à l'éducation et au marché du travail, à l'accessibilité à l'enseignement supérieur, aux mesures de soutien du revenu pour favoriser la participation aux programmes d'éducation permanente et de formation continue, à la prestation de services de garde adéquats pour les enfants ou aux politiques relatives à la sécurité économique et à la sécurité d'emploi. Ces politiques sont-elles mises en place pour répondre aux besoins des personnes désavantagées au plan héréditaire? Récemment, une université canadienne faisait paraître la publicité suivante : « Ce n'est pas tout le monde qui a la chance d'hériter d'une entreprise familiale. Votre avenir est entre vos mains. » En fait, il semble que l'avenir de bon nombre de Canadiens soit, en grande partie, entre les mains de leurs parents.

Notes

Nous voulons remercier Jac-André Boulet, Emilie Allie et un examinateur anonyme, pour les commentaires utiles qu'ils ont formulés concernant des versions antérieures du présent chapitre, ainsi que René Morissette, pour son aide technique.



En résumé, le soutien qu'offrent les parents à l'éducation de leurs enfants reflète leurs propres antécédents scolaires. Une des limitations de cette analyse est qu'il nous est impossible d'analyser le résultat final de ces stratégies, c'est-à-dire le niveau de scolarité atteint par les enfants. La seule conclusion ferme qui se dégage de notre analyse est que les parents plus instruits ont tendance à prendre des mesures qui contribuent au succès de leurs enfants.

## 6. Conclusion

Nous avons examiné dans ce chapitre quelques aspects intergénérationnels de la transmission du capital intellectuel de l'hypothèse voulant que le capital intellectuel héréditaire, transmis par les parents, joue probablement un rôle significatif dans la capacité des enfants d'atteindre, voire de dépasser, le niveau de scolarité de leurs parents. Nos principales conclusions se résument comme suit : [1] On remarque une mobilité ascendante substantielle, au plan de l'éducation; environ la moitié des enfants de notre échantillon ont ainsi dépassé le niveau de scolarité de leurs parents. [2] Le taux de mobilité ascendante régresse « de façon naturelle », car davantage de personnes accèdent au niveau de scolarité le plus élevé, ce qui a pour effet de réduire le nombre d'enfants qui peuvent dépasser le niveau de scolarité de leurs parents. [3] Le capital intellectuel héréditaire joue un rôle déterminant, compte tenu du fait qu'il est beaucoup plus difficile pour les enfants dont les parents n'ont pas complété leurs études secondaires d'atteindre le niveau collégial ou universitaire, que ce ne l'est pour les enfants dont les parents ont fait des études universitaires. Certaines données semblent toutefois indiquer que l'expansion du réseau collégial a fait naître pour certains de nouvelles possibilités de faire des études postsecondaires. [4] L'écart relatif entre les enfants dont les parents se situent aux deux extrêmes de l'échelle de scolarité ne semble pas se combler avec les ans; au contraire, il semble plutôt que la polarisation des possibilités d'éducation s'accroisse. [5] Les capacités de lecture reflètent en grande partie le niveau de scolarité. On note toutefois une grande variation des niveaux d'alphabétisme, à un niveau de scolarité donné; par ailleurs, ces écarts augmentent avec l'âge, ce qui laisse présager une perte éventuelle des capacités de lecture, lorsque celles-ci ne sont pas utilisées régulièrement. [6] Il n'y a pas seulement le niveau de scolarité, mais également

activité précise et le niveau de scolarité des parents ont un certain nombre de facteurs additionnels dont il semble justifié de neutraliser l'effet. L'échantillon se limite aux parents ayant au moins un enfant de 6 à 18 ans vivant avec eux (la taille de l'échantillon est de 1 161). Cinq activités ou caractéristiques liées à l'éducation chez l'enfant sont examinées : [1] si les parents achètent des livres pour leurs enfants; [2] si les parents limitent les heures d'écoute de la télévision de leurs enfants; [3] si les enfants réservent chaque jour un certain temps pour la lecture à la maison; [4] si les enfants ont appris à lire avant la première année et [5] si les enfants ont eu des échecs scolaires (retard d'au moins deux ans par rapport au niveau normal pour les enfants de son âge). Nous avons tenu compte de l'effet du groupe d'âge des parents, de leur niveau de scolarité, du revenu familial (réparti par quintiles), du niveau auquel l'enfant est scolarisé (primaire ou secondaire) et du milieu de vie (urbain ou rural).

Le tableau 8.8 présente les probabilités calculées à partir des régressions. (Les résultats détaillés peuvent être obtenus, sur demande).

Un niveau de scolarité supérieur suppose que les parents sont plus susceptibles d'acheter des livres pour leurs enfants. En outre, la probabilité d'un échec scolaire diminue considérablement chez les enfants de parents plus instruits. En ce qui a trait au temps réservé à la lecture, il semble que seuls les parents qui ont fait des études universitaires y accordent beaucoup plus d'importance que les autres. Parallèlement, il est intéressant de souligner qu'une attention plus grande est portée à la lecture lorsque l'enfant est au primaire—période de formation pour l'aprentissage de la lecture. Par contre, aucune stratégie précise ne semble se dégager, en ce qui a trait aux heures d'écoute de la télévision, bien que l'on puisse présumer que ce temps est réduit automatiquement par le temps consacré à d'autres activités comme la lecture, sans que les parents n'aient à intervenir. L'intervention des parents est plus fréquente auprès des jeunes enfants, ceux qui sont au primaire. Enfin, le fait d'apprendre à lire avant la première année n'est associé à aucune attitude précise des parents d'un niveau de scolarité donné : environ un enfant sur deux commence à lire avant d'entrer en première année, quel que soit le niveau de scolarité des parents. On peut voir dans ce résultat un effet de la généralisation de l'expérience préalable, laquelle n'est pas particulièrement reliée aux antécédents scolaires des parents.



Tableau 8.7  
Statut socio-économique de la profession du père,  
selon le niveau de scolarité du père et de l'enfant

Niveau de scolarité de l'enfant				
Niveau de scolarité du père	Études secondaires	Diplôme d'études secondaires	Études postsecondaires, universitaires	Total
	non terminées	secondaires	non universitaires	
(statut SSE)				
Études secondaires non terminées	33,3	36,4	35,3	39,3
Diplôme d'études secondaires	38,1	39,8	43,3	44,5
Études postsecondaires	43,6	47,6	46,8	49,8
Total	34,4	38,5	39,7	44,4
				38,2

Tableau 8.8  
Probabilité d'adopter des stratégies d'éducation importantes  
pour le rendement scolaire de l'enfant

Achats de livres par les parents	Enfant lit avant la première année	Heures d'écoute de la TV limitées	Temps réservé pour la lecture	Échec scolaire	Âge des parents				
					16 à 25 ans	26 à 35 ans	36 à 45 ans	46 à 55 ans	56 ans et plus
Niveau de scolarité des parents	85,0	38,6	89,3***	68,2	s.o.	1,2**	3,1	13,3*	25,7*
	82,2*	50,2	58,1	52,2	47,6	4,9	44,5	4,5	4,5
	68,3	51,8	54,9	47,6	3,1	4,9	44,5	4,5	4,5
	57,5***	71,2*	50,6	47,9	13,3*	4,9	44,5	4,5	4,5
	61,9	13,5*	50,9	44,5	25,7*	4,5	44,5	4,5	4,5
	61,8	59,5**	48,0	48,7	4,8	42,9	48,0	48,0	48,0
	59,5	48,1	55,8	42,9	4,1	42,9	42,9	42,9	42,9
	77,7*	53,6	62,3	43,2	1,9	43,2	43,2	43,2	43,2
	92,5*	53,5	59,4	67,7*	1,1**	67,7*	67,7*	67,7*	67,7*
	Revenu familial	61,7	44,7	59,3	42,9	9,9**	42,9	42,9	42,9
Quintile inférieur	87,5*	51,6	56,8	55,9	11,4*	55,9	55,9	55,9	55,9
Troisième quintile	72,6	41,2	66,8	43,3	6,6	43,3	43,3	43,3	43,3
Quatrième quintile	71,8***	71,3***	45,1**	54,1	0,2	54,1	54,1	54,1	54,1
Quintile supérieur	64,0	49,6	53,7	48,4	3,8**	48,4	48,4	48,4	48,4
Niveau de scolarité actuel de l'enfant	79,3*	55,3*	64,1*	56,3*	3,6**	56,3*	56,3*	56,3*	56,3*
Secondaire	57,2	48,8	39,4	36,7	1,9	36,7	36,7	36,7	36,7
Primaire	84,5*	44,0*	64,2**	47,3	1,8***	47,3	47,3	47,3	47,3
Lieu de résidence	68,7	55,5	53,4	50,0	3,3	50,0	50,0	50,0	50,0
Rural	68,7	55,5	53,4	50,0	3,3	50,0	50,0	50,0	50,0
Urbain	1,8***	1,9***	3,3	3,3	3,3	3,3	3,3	3,3	3,3

**Nota :** Les données dans le tableau sont des probabilités estimées à partir d'un modèle logistiqu. Les estimations détaillées sont disponibles auprès des auteurs, sur demande.

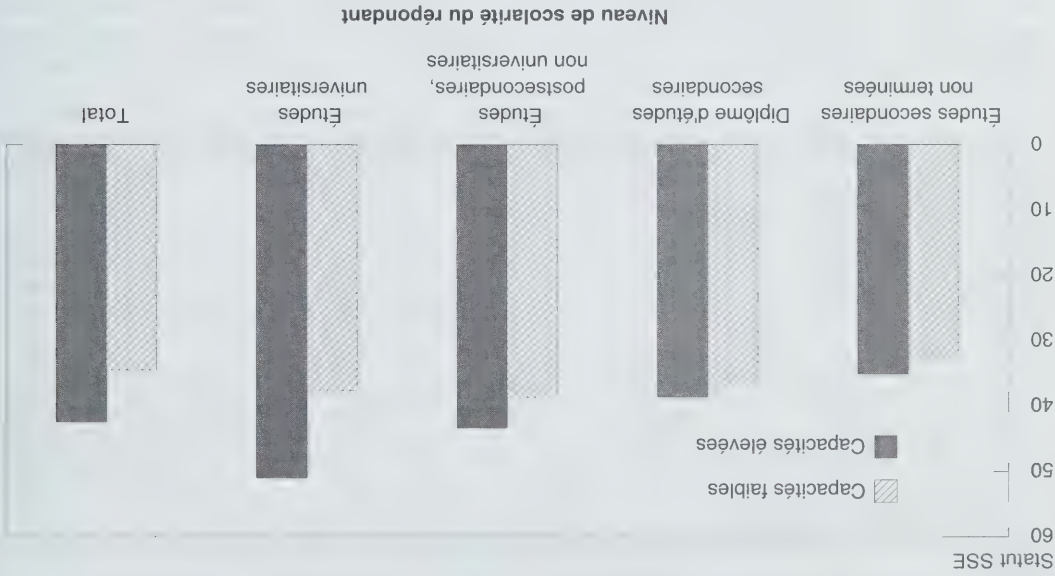
\* différence significative par rapport au groupe de référence, au niveau de 95 %.

\*\* différence significative par rapport au groupe de référence, au niveau de 90 %.

\*\*\* différence significative par rapport au groupe de référence, au niveau de 90 %.

s.o. : Vu la façon dont la variable dépendante a été créée, le groupe des 16 à 25 ans n'est pas pertinent et il a été omis de l'analyse de régression.

Graphique 8.2  
Statut socio-économique (SSE) de la profession, selon le niveau de scolarité et le niveau de compréhension de textes schématisques du répondant



élevé. Est-ce qu'une telle situation se reflète par un niveau de scolarité légèrement supérieur chez les enfants et celui-ci diffère-t-il du niveau de scolarité des enfants dont les pères du même faible niveau de scolarité occupent un emploi de plus faible statut socio-économique?

Le tableau 8.7 présente les résultats moyens du statut socio-économique de la profession du père, lesquelles données sont recoupées en fonction des niveaux de scolarité du père et de l'enfant. Si la profession du père, à un niveau de scolarité donné, a un effet, on peut alors s'attendre à ce que le statut socio-économique moyen du père (à quelque niveau de scolarité que ce soit) augmente à mesure que le niveau de scolarité de l'enfant progresse. Et c'est en fait ce qui se produit. Les répondants atteignent en effet des niveaux de scolarité plus élevés, qui sont en accord avec le statut socio-économique plus élevé du père, quel que soit le niveau de scolarité du père. À chaque niveau de scolarité des parents, l'écart dans le statut socio-économique, entre des enfants qui n'ont pas terminé leurs études secondaires et ceux titulaires d'un grade universitaire, est d'environ six points, ce qui représente environ un sixième de l'échelle globale des résultats.

Ces résultats montrent que l'expérience du marché du travail des parents (telle que mesurée par la situation professionnelle) a une incidence sur le niveau de scolarité des enfants.

Ainsi, les pères de faibles niveaux de scolarité, qui ont réussi à accéder à des postes élevés, sont mieux en mesure d'offrir à leurs enfants un milieu propice à l'atteinte d'un niveau de scolarité supérieur. À l'inverse, les pères qui, malgré leur niveau de scolarité élevé, occupent un emploi de faible niveau (en regard de leur scolarité) sont plus susceptibles d'avoir des enfants de niveau de scolarité relativement plus faible.

### 5. Stratégies de soutien de l'éducation

Comment ces tendances se créent-elles? Est-ce que les parents plus instruits adoptent des stratégies reconnues pour favoriser la réussite scolaire? Nous formulons l'hypothèse voulant que la transmission du capital intellectuel au sein de la famille se reflète par l'adoption de stratégies de promotion de l'éducation qui se matérialisent de diverses façons. L'EIAA identifie les personnes qui ont des enfants de 6 à 18 ans et réunit un certain nombre de variables avec lesquelles il est possible d'établir un lien avec les stratégies d'éducation des enfants. Nous tentons ici d'établir un lien entre le niveau de scolarité des parents et certaines variables de remplacement pouvant refléter la capacité des parents de favoriser les études chez leurs enfants. Nous utilisons une série de régressions logistiques qui établissent un rapport entre une

Tableau 8.6  
Statut socio-économique de la profession

Ensemble des âges				(statut socio-économique)
	26 à 35 ans	46 à 55 ans		
A. Niveau de scolarité	34,1	33,9	33,0	
	38,5	42,0	37,8	
	43,5	49,8	42,2	
	51,5	50,6	49,1	
	40,8	41,6	38,6	
B. Niveau de compréhension de textes schématiques	33,3	34,8	32,4	
	37,5	38,7	36,8	
	40,7	42,0	40,6	
	47,5	51,8	45,0	
	40,8	41,6	38,6	
Total				

Nota : Le statut socio-économique de la profession est tiré de Blishen et coll. (1987) et il est basé sur le niveau de scolarité, le revenu et le ratio de femmes dans la profession, selon les données du Recensement de 1981.

remarquent chez les travailleurs des niveaux d'alphabétisme élevés. Les niveaux de scolarité élevés, tout comme les niveaux d'alphabétisme élevés, sont bien récompensés sur le marché du travail et il ne semble pas y avoir de différence significative au fil des ans, autre que celle pouvant s'expliquer par l'expérience acquise avec l'âge ou l'ancienneté.

Ceci nous amène à nous poser la question suivante : les capacités de lecture améliorent-elles les possibilités d'emploi, en plus d'exercer un effet direct sur le niveau de scolarité? Le graphique 8.2 apporte une réponse claire à cette question. Ainsi, comme on pouvait s'y attendre, le statut socio-économique de la profession augmente, non seulement avec le niveau de scolarité, mais également en fonction du niveau d'alphabétisme. La différence dans le statut socio-économique, entre les niveaux d'alphabétisme faible et élevé, augmente elle aussi à mesure que le niveau de scolarité augmente. Les capacités de lecture jouent donc un rôle important dans la détermination de la situation sur le marché du travail.

Les antécédents de travail des parents influent-ils sur le capital intellectuel qu'ils transmettent à leurs enfants? Pour répondre à cette question, nous examinons si (à un niveau de scolarité donné du père) la profession exercée par le père explique le niveau de scolarité de ses enfants. En d'autres mots, il est possible que de bonnes possibilités d'emplois se soient présentées pour des pères de faible niveau de scolarité et que ces derniers aient pu ainsi accéder à des postes d'un statut professionnel relativement

marginaux de l'éducation semblent en effet augmenter (selon le résultat moyen du statut socio-économique de la profession). Les titulaires d'un diplôme d'études secondaires obtiennent environ cinq points de plus que ceux qui n'ont pas terminé ces études, alors que les diplômés universitaires ont un avantage de sept points sur les autres qui n'ont pas fait d'études universitaires. Par ailleurs, à tous les niveaux de scolarité, sauf le niveau universitaire, la cohorte plus âgée a l'avantage sur la plus jeune, au plan du statut socio-économique de la profession. Une des explications plausibles est que cet avantage de la génération plus âgée est imputable à l'expérience acquise, laquelle donne lieu à des promotions. Comme il fallait s'y attendre, plus le niveau de scolarité est élevé, plus cet avantage de la génération plus âgée est grand. Il est toutefois une exception à cette règle et elle se situe au niveau des personnes qui ont acquis un diplôme universitaire, où la génération plus âgée arrive à égalité avec la plus jeune. Même si les jeunes répondants instruits ne peuvent prétendre avoir l'ancienneté ou l'expérience nécessaires pour accéder aux postes de cadres supérieurs, leur présence se fait néanmoins bien sentir au sein des postes de professionnels et de techniciens hautement qualifiés.

Le volet B brosse un tableau similaire, qui décrit cette fois-ci la relation entre le statut socio-économique de la profession et le niveau atteint selon l'échelle de compréhension de textes schématiques. Pour les deux cohortes, les gains les plus élevés au plan professionnel se



Déterminants des résultats de la compréhension de textes schématiques :  
Résultats de la régression des moindres carrés, selon l'âge

Catégorie de référence		Population totale		26 à 35 ans		46 à 55 ans	
Sexe (Femme)	4,8**	-7,0	18,0*				
Âge (36 à 45 ans)	12,2*						
16 à 25 ans	12,8*						
46 à 55 ans	7,1**						
56 ans et plus	-19,4*						
Niveau de scolarité des parents (études secondaires terminées)	-28,9*	-27,2*	-20,8*				
Études secondaires non terminées	2,3	2,5	-28,3*				
Études postsecondaires							
Profession du père (travailleur agricole qualifié)	67,1*	104,1*	-15,3				
Forces armées	44,2*	19,8**	25,2**				
Gestionnaires	50,6*	38,0*	47,6*				
Professionnels	43,6*	11,8	31,7***				
Techniciens	41,6*	25,2**	46,7**				
Secteur des services	24,8*	1,1	3,5				
Ouvriers	23,4*	-13,1	2,3				
Opérateurs de machines et d'installations	25,3*	-9,4	8,2				
Travailleurs non qualifiés	4,3	-23,7**	-3,3				
N'a jamais travaillé	22,3	15,1	0,0				
Ne sait pas	-16,5*	-52,2*	-63,3*				
Non précisé	30,0**	-35,72	-6,62				
Mère ayant déjà travaillé	27,8*	11,3**	13,1**				
Rural	4,7**	-3,4	-0,3				
Région de naissance (Ontario)	-26,9*	-33,9*	4,7				
À l'étranger	-10,4*	-13,9***	-8,3				
Atlantique	-12,1*	-12,6**	-11,9				
Québec	1,8	-9,9	13,9				
Ouest							
R <sup>2</sup> corrigé	0,266	0,196	0,138				
Valeur de F	68,3	11,7	5,51				
Nombre d'observations	4 650	924	566				

**Nota :** Les catégories de référence sont indiquées par des parenthèses ( ). Pour les résultats dans la première colonne, la catégorie de référence est formée des femmes âgées de 36 à 45 ans, dont le parent le plus instruit a un diplôme d'études secondaires, dont le père est un travailleur agricole qualifié, dont la mère n'a pas travaillé, qui vivent en milieu urbain et qui sont nées en Ontario. Le cas de référence pour les résultats dans les autres colonnes sont les femmes, dont le parent le plus instruit a un diplôme d'études secondaires, dont le père est un travailleur agricole qualifié, dont la mère n'a pas travaillé, qui vivent en région urbaine et qui sont nées en Ontario.

\* significatif au niveau de 99 %  
\*\* significatif au niveau de 95 %  
\*\*\* significatif au niveau de 90 %

résultats portent à croire que la formation continue—comme tenu du fait que cette formation est donnée par le biais du marché du travail, n'est pas—ou est rarement—un instrument qui permet aux travailleurs de niveau de scolarité et de capacités limités d'améliorer sensiblement leur situation.

L'approche utilisée ici est la même qu'à la section précédente, c'est-à-dire que nous analysons l'effet de certains facteurs sur les capacités de lecture. Pour ce faire, nous utilisons la régression des moindres carrés pour étudier la relation entre les résultats obtenus aux tests de compréhension de textes schématiques (les résultats réels, plutôt que les niveaux discrets) et un certain nombre de facteurs pertinents. Ces variables indépendantes sont les mêmes que celles qui ont été utilisées pour l'analyse du nombre d'années de scolarité. Le tableau 8.5 indique l'effet de ces facteurs sur l'évaluation des capacités de lecture. Dans l'ensemble, les hommes ont un niveau d'alphabétisme légèrement supérieur à celui des femmes, alors que le niveau d'alphabétisme des jeunes est nettement supérieur à celui de leurs homologues plus âgés. En outre, la scolarité des parents influe considérablement sur les résultats obtenus par les répondants aux tests d'alphabétisme, l'écart étant plus marqué chez les répondants dont les parents n'ont pas terminé leurs études secondaires. Lorsqu'on compare les résultats pour la profession de travailleur agricole qualifié à ceux de presque toutes les autres professions, on remarque que ce facteur influe de façon positive sur les capacités de lecture. Ces autres professions peuvent être regroupées en deux catégories, comme suit : d'une part, les emplois de professionnels (gestionnaires, professionnels, techniciens, commis) qui affichent l'écart positif le plus élevé, lequel est de l'ordre de 40 à 50 points, et d'autre part les emplois de cols bleus du secteur des services, avec un avantage d'environ 25 points. Il semble par ailleurs y avoir une relation positive entre le fait que la mère du répondant travaille et des résultats plus élevés. Enfin, au niveau des différences régionales, les résultats des tests d'alphabétisme semblent légèrement plus élevés en Ontario et dans l'ouest du Canada qu'au Québec et dans les provinces de l'Atlantique, un résultat qui vient corroborer la répartition du niveau de scolarité décrite à la section précédente.

Les résultats confirment que, toutes autres choses étant égales, les jeunes se situent à des niveaux d'alphabétisme plus élevés. Leurs résultats sont en effet de quelque 50 points plus

Le lien entre l'alphabétisme et le niveau de scolarité ne fait aucun doute. Comme on pouvait s'y attendre, plus le niveau de scolarité est élevé, plus le niveau d'alphabétisme moyen l'est également. On remarque toutefois une dispersion assez large des capacités de lecture autour de la moyenne, et ce à tous les niveaux de scolarité, et ces écarts tendent à être plus larges chez les cohortes plus âgées. Ceci vient corroborer l'hypothèse selon laquelle il y aurait détérioration des capacités de lecture lorsque celles-ci ne sont pas utilisées sur une base quotidienne. Les capacités de lecture sont également un fort co-déterminant de l'accès à la formation continue. Quel que soit le niveau de scolarité, les personnes ayant de grandes capacités de lecture sont également plus susceptibles de participer à des cours de formation continue et d'éducation permanente.

#### 4. Contexte socio-économique

Partant des principales conclusions des deux sections précédentes, nous examinons maintenant les liens entre les antécédents de travail, la scolarité et les capacités de lecture, en y ajoutant la dimension intergénérationnelle mesurée à partir de l'effet de la profession exercée par le père. Nous utilisons une variable qui reflète le statut socio-économique (SSE) des professions, pour mesurer la situation sur le marché du travail. Ceci nous permet de réduire au minimum les problèmes associés à la forte variabilité d'échantillonnage que l'on observe dans certaines professions. Pour ce faire, nous avons recours à une mesure souvent utilisée de l'« importance » relative d'une profession, sur une échelle qui va de 25 à 62 environ; il y a donc un écart de 37 points entre les professions qui obtiennent les notes maximales et les autres qui se situent au bas de l'échelle.

Les données au volet A du tableau 8.6 montrent que le statut socio-économique de la profession augmente de façon significative, selon le niveau de scolarité. Les avantages d'abord





Tableau 8.3  
Déterminants du nombre d'années de scolarité :  
Résultats de la régression des moindres carrés, selon l'âge

Population totale	26 à 35 ans	46 à 55 ans
-------------------	-------------	-------------

Cas de référence	11,66*	12,79*	11,90*
Sexe (Femme)			
Homme	0,05	-0,05	0,68**
Âge (36 à 45 ans)			
16 à 25 ans	-0,32**		
26 à 35 ans	0,06		
46 à 55 ans	-0,02		
56 ans et plus	-1,67*		
Niveau de scolarité des parents (études secondaires complétées)			
Études secondaires non terminées	-1,62*	-0,95*	-1,42*
Études postsecondaires	0,65*	1,16*	-0,43
Profession du père (travailleur agricole qualifié)			
Forces armées	2,50*	4,30*	-1,41
Gestionnaires	2,72*	1,31*	3,53*
Professionnels	3,59*	1,87*	5,90*
Techniciens	1,93*	0,20	3,02*
Commis	2,10*	1,16**	3,36*
Secteur des services	1,79*	-0,06	1,72*
Ouvriers	1,13*	-0,75***	1,33*
Opérateurs de machines et d'installations	0,91*	-0,58	0,87**
Travailleurs non qualifiés	0,56*	-1,08**	0,72
N'a jamais travaillé	2,70**	2,96	0,00
Ne sait pas	-0,16	-1,90**	-0,86
Non indiqué	3,13*	-1,19	9,93*
Mère ayant déjà travaillé	1,09*	0,89*	-0,52***
Rural			
-0,46*	-0,41	-0,36	
Région de naissance (Ontario)			
À l'étranger	-0,28***	-0,89*	0,71
Atlantique	-0,81*	-0,11	-1,49*
Québec	-1,25*	-0,41	-2,33*
Ouest	-0,42*	-0,49**	0,13
R <sup>2</sup> corrigé	0,3051	0,2478	0,4392
Valeur de F	82,7	15,5	23,1
Nombre d'observations	4 650	924	566

**Nota :** Les catégories de référence sont indiquées par des parenthèses ( ). Pour les résultats dans la première colonne, la catégorie de référence est formée des femmes âgées de 36 à 45 ans, dont le parent le plus instruit a un diplôme d'études secondaires, dont le père est un travailleur agricole qualifié, dont la mère n'a pas travaillé, qui vivent en milieu urbain et qui sont nées en Ontario. Les cas de référence pour les résultats dans les autres colonnes sont les femmes, dont le parent le plus instruit a un diplôme d'études secondaires, dont le père est un travailleur agricole qualifié, dont la mère n'a pas travaillé, dont la mère n'a pas travaillé, qui vivent en région urbaine et qui sont nées en Ontario.

\* significatif au niveau de 99 %.  
\*\* significatif au niveau de 95 %.  
\*\*\* significatif au niveau de 90 %.

polarisation. Les variables examinées sont le sexe (puisque la propension à atteindre certains niveaux de scolarité peut varier en fonction du sexe), l'âge (pour saisir l'effet de la cohorte) et le niveau de scolarité des parents. Est également incluse la profession du père, cette variable servant à mesurer l'effet que pourraient exercer les antécédents de travail des parents sur le niveau de scolarité des enfants, en plus de l'effet direct de leur niveau de scolarité.

Nous avons aussi inclus la variable **mère ayant déjà travaillé**. Comme nous l'avons indiqué précédemment, cette variable fait référence aux antécédents de travail de la mère. Nous croyons également que le niveau de scolarité peut s'expliquer en partie par le lieu de naissance (région précise et selon que la personne est née au Canada ou à l'étranger), ainsi que par le lieu de résidence (région rurale ou urbaine). L'éloignement et l'isolement des petites communautés peuvent en effet nuire à la poursuite des études. Aussi avons-nous tenu compte de l'effet de la région de naissance et du lieu de résidence (urbain ou rural).

Les résultats obtenus sont présentés au tableau 8.3 et peuvent se résumer comme suit :

[1] Le niveau de scolarité des parents a une incidence réelle : les personnes dont les parents n'ont pas terminé leurs études secondaires comptent en moyenne 1,5 an de scolarité de moins que celles dont les parents sont titulaires d'un diplôme d'études secondaires. Par ailleurs, les personnes dont les parents ont obtenu un diplôme ou un grade d'études postsecondaires ont un niveau de scolarité qui est de trois quarts d'année plus élevé.

[2] Il semble y avoir polarisation de l'accès à l'éducation. Les membres de la cohorte plus jeune, dont les parents n'ont pas terminé leurs études secondaires, ont à peu près les mêmes paramètres que ceux de la cohorte plus âgée, alors que ceux de la cohorte plus jeune dont les parents ont fait des études postsecondaires ont un niveau de scolarité nettement supérieur à leurs homologues plus âgés.

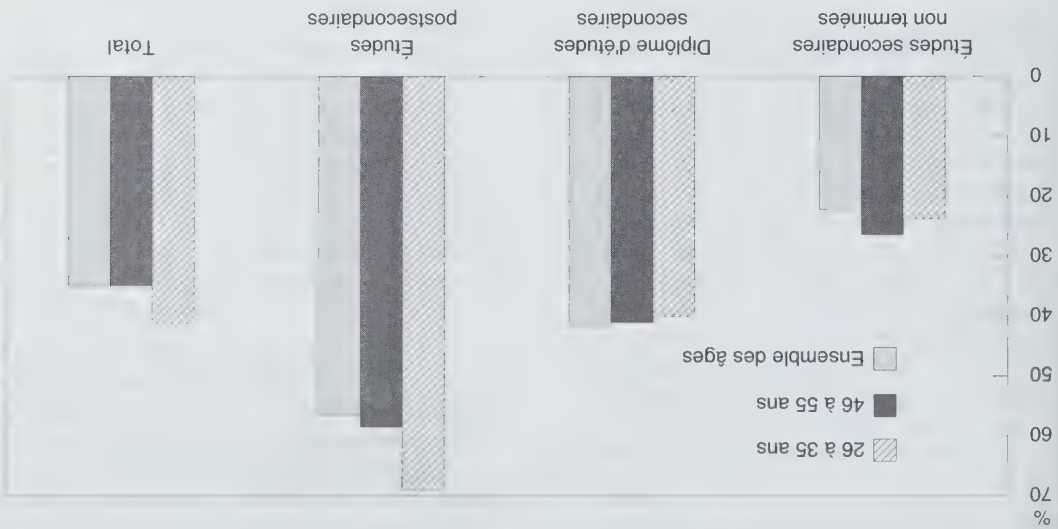
[3] La profession du père influe fortement sur le niveau de scolarité. Ainsi les personnes dont le père est un professionnel ont jusqu'à 3,5 années de scolarité de plus que celles dont le père est un travailleur agricole qualifié.

[4] Le niveau de scolarité est nettement plus élevé lorsque la mère travaille. Cette variable ne semble pas influencer de façon significative sur la scolarité de la cohorte plus âgée.

[5] La province de naissance—et probablement aussi la province dans laquelle se font la majeure partie des études—exerce aussi un effet : au Québec, par exemple, les personnes ont un niveau de scolarité qui est d'environ un an inférieur aux habitants de l'Ontario, alors que la différence est d'environ deux tiers d'année dans les provinces de l'Atlantique et de près d'une demi-année dans l'Ouest. Un tableau plus précis ressort lorsque nous comparons les deux cohortes : les différences régionales sont beaucoup plus marquées (notamment au Québec et dans les provinces de l'Atlantique) parmi la cohorte plus âgée, alors qu'elles disparaissent presque entièrement chez la cohorte plus jeune.

En résumé, on remarque une progression du niveau de scolarité moyen de la population au fil des ans; ainsi, 50 % des répondants avaient dépassé le niveau de scolarité de leurs parents. Cependant, en raison précisément du fait qu'une proportion croissante de la population a accès au niveau de scolarité le plus élevé (universitaire), la possibilité de progression diminue peu à peu. C'est principalement ce qui explique pourquoi seulement 51 % des répondants de la cohorte plus jeune affichent une mobilité ascendante au plan de l'éducation, alors que la proportion est de 58 % dans la cohorte plus âgée. Le capital intellectuel transmis des parents influence également considérablement sur le rendement des enfants. Un peu plus du tiers des répondants ont fait des études postsecondaires, mais cette population n'est pas répartie également selon le niveau de scolarité des parents. Alors que 56 % des répondants dont les parents avaient fait des études postsecondaires ont eux-mêmes atteint ce niveau de scolarité, la proportion n'a été que de 22 % parmi les répondants dont les parents n'avaient pas terminé leurs études secondaires. Enfin, la polarisation semble s'être accentuée au fil des ans : les personnes dont les parents ont fait des études postsecondaires sont mieux outillées pour poursuivre de telles études (la probabilité augmente à 69 %, alors qu'elle n'est que de 58,5 % pour la cohorte plus âgée). La situation des personnes dont les parents sont moins instruits est demeurée inchangée.

Graphique 8.1  
Probabilité de faire au moins des études postsecondaires, selon l'âge et le niveau de scolarité des parents



en outre près de trois fois plus élevée chez la génération plus jeune et elle est environ de deux pour un, chez la génération plus âgée.

Les données illustrées par cette figure fournissent les premières indications d'une intensification de la polarisation de l'accès à l'éducation. Ainsi, une comparaison entre les deux cohortes laisse croire que l'accès à l'enseignement postsecondaire et le succès de ces études sont nettement en hausse chez les personnes dont les parents ont eux-mêmes fait des études postsecondaires, alors que la situation des répondants dont les parents ont au plus un diplôme d'études secondaires ne s'est pas améliorée et pourrait même s'être détériorée. Ce contraste qui ressort en fonction du niveau de scolarité des parents est encore plus marqué lorsqu'on limite la comparaison aux titulaires d'un diplôme universitaire. Ces données viennent corroborer le fait que les collèges, en qualité d'établissements d'enseignement postsecondaire, ont contribué à améliorer l'accès à ces établissements, en particulier pour ceux dont le capital intellectuel héréditaire est minimal.

Pour déterminer les facteurs qui influent sur l'expérience scolaire des répondants, nous utilisons la méthode de régression des moindres carrés ordinaires pour examiner la relation entre le nombre d'années d'études complétées par le répondant et un certain nombre de facteurs pertinents. Le but de cette analyse est de mesurer l'effet de divers facteurs dans un milieu contrôlé et d'examiner plus à fond l'hypothèse de la

l'élévation qui a suivi de l'âge de fréquentation obligatoire ont largement contribué à ce phénomène. Cependant, seulement un peu plus de 40 % des répondants dont les parents n'avaient qu'un diplôme d'études secondaires ont atteint un niveau de scolarité plus élevé. (Fournier et coll., 1995, présentent des résultats similaires.)

Les différences entre le niveau de scolarité des deux cohortes ne sont pas trop prononcées. Bien que la mobilité ascendante soit plus forte dans la cohorte plus jeune, pour ce qui est des répondants dont les parents n'ont pas terminé leurs études secondaires, elle est dans l'ensemble légèrement plus élevée dans la cohorte plus âgée. Ceci n'a rien de surprenant, compte tenu du fait que davantage de personnes poursuivent des études à un niveau supérieur. Comme le niveau de scolarité général de la population s'élève peu à peu, il devient plus difficile de dépasser le niveau de scolarité de ses parents, même dans le contexte d'un système d'éducation élargi et plus accessible.

Le graphique 8.1 illustre la probabilité d'obtenir au moins un diplôme d'études postsecondaires, en fonction du niveau de scolarité des parents. On remarquera que cette probabilité augmente parallèlement au niveau de scolarité des parents. En fait, les personnes dont les parents détiennent un certificat ou un grade d'études postsecondaires sont 2,5 fois plus susceptibles d'atteindre eux-mêmes au moins ce niveau que ceux dont les parents n'ont pas terminé leurs études secondaires. Cette proportion est



Tableau 8.2

Pourcentage des personnes ayant un niveau de scolarité supérieur, égal ou inférieur à celui de leurs parents, selon le niveau de scolarité des parents et l'âge du répondant

Total	Études postsecondaires			Diplôme d'études secondaires			Études secondaires non terminées		
	Supé- rieur	Egal	Infé- rieur	Supé- rieur	Egal	Infé- rieur	Supé- rieur	Egal	Infé- rieur

(pourcentage)									
26 à 35 ans	84,1	14,8*	-	40,0*	46,4*	-	41,0*	52,6*	44,1
46 à 55 ans	77,0	19,8*	-	41,0*	52,6*	-	41,4	44,1	14,5*
Total	74,3	23,0	-	41,4	44,1	14,5*	9,1*	37,4	53,5

\* Coefficients de variation élevés, mais acceptables.

- Coefficient de variation trop élevé pour que le chiffre soit fiable.

ouvriers, les travailleurs qualifiés de l'agriculture et des pêches, les opérateurs et monteurs de machines et d'installations, le personnel des forces armées et les travailleurs non qualifiés)—un résultat surprenant dans une économie qui se caractérise par une diminution du nombre relatif d'emplois dans le secteur manufacturier et par la croissance rapide de l'économie de services.

## 2. Mobilité intergénérationnelle de la scolarité

Le niveau de scolarité des parents est un des facteurs qui déterminent le niveau de scolarité atteint par une personne. Il est probable qu'un milieu de soutien hautement propice à l'apprentissage à la maison (évalué par approximation à partir du niveau de scolarité des parents et de la profession du père) se reflète par l'atteinte de niveaux de scolarité plus élevés chez les enfants. Un tel milieu de soutien se manifeste non seulement par la capacité de financer des études supérieures pour ses enfants, mais également par les interactions quotidiennes d'une « qualité intellectuelle » supérieure, qui s'établissent entre les parents et les enfants.

Dans quelle mesure la scolarité des répondants à notre enquête est-elle reliée au niveau de scolarité de leurs parents? Pour répondre à cette question, nous calculons les corrélations des rangs de Spearman entre le niveau de scolarité des répondants (selon le sexe et l'âge) et celui de leur père et de leur mère. Les résultats ne montrent aucune différence significative dans la relation entre le niveau de scolarité du répondant et celui de l'un ou l'autre de ses parents. Les coefficients de corrélation se situent entre 0,38 et 0,45 et diffèrent peu, que le calcul soit basé sur le niveau de scolarité de la mère ou du père. En fait, il existe toujours une corrélation

plus forte entre le niveau de scolarité du répondant et celui du parent le plus instruit (celle-ci variant entre 0,40 et 0,53). En outre, la corrélation est toujours plus forte entre les niveaux de scolarité des deux parents qu'entre les niveaux de personnes de générations différentes, le coefficient pouvant atteindre jusqu'à 0,66 dans le premier cas.

En raison de ces résultats, nous utiliserons désormais le niveau de scolarité du parent le plus instruit pour le reste de notre analyse. Le tableau 8.2 réunit tous les principaux éléments de trois matrices de la mobilité de la scolarité, soit une pour l'ensemble de la population (moins les étudiants à plein temps) et une pour chaque cohorte d'âge. Vu la taille limitée de l'échantillon, il est impossible de présenter les données pour des sous-groupes de la population. Les données demeurent néanmoins suffisamment fiables pour brosser un tableau de la mobilité intergénérationnelle de la scolarité au Canada<sup>3</sup>. La mobilité de la scolarité, qui correspond à la différence entre le niveau de scolarité des parents et de leurs enfants, est importante au Canada : ainsi, plus des deux tiers des Canadiens ont atteint un niveau de scolarité qui diffère de celui de leurs parents. Environ 51 % ont un niveau de scolarité supérieur à celui de leurs parents, alors que 17 % ont un niveau de scolarité inférieur et c'est ce qui explique que le niveau de scolarité moyen de la population augmente au fil des ans. Bien sûr, plus le niveau de scolarité des parents est faible, plus l'ampleur potentielle de la mobilité ascendante est grande et, partant, plus le taux ascendant est élevé. En fait, environ trois répondants sur quatre, dont les parents n'avaient pas terminé leurs études secondaires, ont fait des études au moins un peu plus poussées que leurs parents. Il ne fait aucun doute que la fréquentation scolaire obligatoire et

Tableau 8.1  
Scolarité, alphabétisme et profession, selon l'âge

Ensemble des âges	26 à 35 ans		46 à 55 ans	
	(pourcentage)		(pourcentage)	
A. Niveau de scolarité	Études secondaires non terminées	22,6	36,8	33,9
	Diplôme d'études secondaires	38,4	32,4	33,5
	Études postsecondaires, non universitaires	22,9	15,2	17,1
	Études universitaires	16,1	15,7	15,5
	B. Niveau de compréhension de textes schématiques	13,6	23,0	23,9
C. Profession	Niveau un	24,9	31,0	23,9
	Niveau deux	33,9	23,6	29,9
	Niveau trois	27,6	22,4	22,3
	Niveaux quatre et cinq	5,8	11,3	7,9
	Gestionnaires	21,0	18,2	17,3
C. Profession	Techniciens	15,3	11,2	11,6
	Commis	16,1	12,3	14,6
	Services	13,4	18,0	15,1
	Colis bleus	28,3	29,0	33,5
Source : Calculs des auteurs à partir de données de Statistique Canada. Enquête internationale sur l'alphabétisation des adultes.				

Il nous est également possible d'examiner diverses stratégies adoptées par les parents en matière d'éducation, en vue par exemple de développer délibérément un plus grand capital intellectuel pour les enfants. Les personnes car nous étions intéressées par le dernier niveau de scolarité atteint par les répondants<sup>2</sup>.

Le tableau 8.1 énumère les principales caractéristiques des deux groupes d'âge étudiés. Le volet A du tableau indique que la génération plus jeune a atteint des niveaux de scolarité supérieurs à la plus âgée et que les principales différences se situent au niveau de la proportion qui ont obtenu un diplôme ou postsecondaire d'enseignement secondaire ou postsecondaire non universitaire. Ces écarts s'expliquent en grande partie par la forte expansion du réseau collégial, au cours des 20 dernières années. À titre de comparaison, les titulaires d'un diplôme universitaire ne sont que légèrement plus nombreux dans la cohorte plus jeune. Ceci n'exclut pas pour autant la possibilité que, parmi les 26 à 35 ans, certains retournent à l'université et atteignent un niveau de scolarité plus élevé (probablement un grade universitaire), même si ces personnes n'étaient pas inscrites au moment de l'enquête.

Les pourcentages pour le volet B montrent qu'environ 62 % de la génération plus jeune se

situé à un niveau d'alphabétisme égal ou supérieur à 3, comparativement à une proportion de 46 % chez les plus âgés. Cependant, le fait qu'un certain nombre de jeunes se situent à un niveau d'alphabétisme relativement plus élevé n'est qu'une consolation modérée, étant donné que la proportion d'un faible niveau d'alphabétisme demeure élevée. Le rendement inférieur de la génération plus âgée peut être attribuable, soit à un faible niveau de compétences durant la jeunesse (lequel niveau est demeure faible), soit à une perte des compétences au fil des ans.

Enfin, l'information au volet C illustre la répartition, selon la profession, de toutes les personnes actives dans les deux cohortes d'âge. On remarquera qu'une plus forte proportion de personnes de la génération plus âgée occupent des postes de gestionnaires, alors que les jeunes sont proportionnellement plus nombreux au sein des postes de professionnels et de techniciens. Ces résultats témoignent du fait que les postes de gestionnaires requièrent une expérience que la plupart des jeunes ne possèdent pas encore, mais également que l'élévation du niveau de scolarité permet aux jeunes d'accéder en plus grands nombres à des postes hautement spécialisés. Les postes de commis demeurent des postes de débutant pour bon nombre de jeunes. Il est également intéressant de souligner l'importance des emplois manuels chez les jeunes travailleurs (ce groupe inclut les



enfants de parents relativement peu instruits des possibilités similaires à celles offertes aux enfants issus de familles plus instruites.

Nos principales conclusions se résument

comme suit : [1] malgré une mobilité ascendante substantielle au niveau de la scolarité, le capital intellectuel héréditaire continue d'influer de façon significative sur la capacité d'une personne d'avoir accès à l'enseignement postsecondaire et de réussir ses études; [2] outre l'éducation, l'expérience professionnelle des parents influence aussi sur le niveau de scolarité des enfants et [3] la façon dont les parents appuient leurs enfants dans leurs études reflète leur propre formation scolaire, les parents plus instruits étant plus susceptibles d'adopter des stratégies visant à guider leurs enfants sur la voie du succès.

## 1. Vue d'ensemble

Notre analyse est basée sur l'Enquête internationale sur l'alphabétisation des adultes (EIA), laquelle a été menée en 1994 auprès de répondants d'un certain nombre de pays industrialisés, dans le but de : « [1] mettre en lumière le rapport entre le rendement, le niveau de scolarité, la situation vis-à-vis de l'activité et l'emploi chez les personnes qui avaient des capacités de lecture moyennes et de [2] comparer et mettre en contraste les profils d'alphabétisme de certaines sous-populations importantes sur le plan économique dans divers pays et groupes linguistiques » (Statistique Canada, 1996, p. 12).

Nous utilisons ici l'information recueillie auprès d'un échantillon représentatif de 5 660 Canadiens, en nous intéressant à deux cohortes d'âge distinctes, soit les 26 à 35 ans et les 46 à 55 ans. Nous avons choisi le groupe des 26 à 35 ans, car il s'agit de personnes en début de carrière mais qui ont terminé leur premier programme d'études. Les 46 à 55 ans ont en moyenne 20 ans de plus que l'autre cohorte (sans toutefois être suffisamment âgés pour représenter les parents de la cohorte plus jeune) et sont toujours sur le marché du travail. La différence d'âge entre les deux cohortes distingue une génération de la suivante. La cohorte plus âgée a fait ses études à la fin des années 40 et durant les années 50, alors que les plus jeunes étaient aux études durant les années 70 et 80. L'échantillon de l'EIA compte 1 010 Canadiens âgés de 26 à 35 ans (pour une population de quelque cinq millions) et 658 Canadiens de 46 à 55 ans (pour une population d'environ 3,3 millions).

Les analyses sur la mobilité intergénérationnelle comportent des exigences très rigoureuses en matière de données. Ainsi, la taille limitée de l'échantillon nous a forcé à ne tenir compte que de quatre niveaux de scolarité pour les répondants (études secondaires non terminées, diplôme d'études secondaires, études postsecondaires non universitaires et études universitaires) et trois niveaux pour leurs parents (études secondaires non terminées, diplôme d'études secondaires et études postsecondaires). Ont été exclues de l'analyse les personnes pour lesquelles l'information sur le niveau de scolarité des deux parents était manquante<sup>1</sup>.

Dans la présente analyse, « alphabétisme » ne fait référence qu'à une seule des trois mesures évaluées lors de l'EIA, en l'occurrence la compréhension de textes schématiques. Cette notion fait référence à la capacité d'utiliser de l'information extraite de documents, tels que des formulaires de paie, des mandats d'emploi, des cartes, des horaires d'autobus et des graphiques. Cette mesure de l'alphabétisme peut être considérée comme réunissant des éléments à la fois de la compréhension de textes suivis (capacité d'utiliser de l'information sous forme par exemple d'éditorial, de poèmes, d'ouvrages de fiction et de bulletins de nouvelles) et de la compréhension de textes au contenu quantitatif (capacité d'effectuer des opérations arithmétiques diverses), deux échelles de compréhension également évaluées dans l'EIA. Nous faisons souvent une distinction entre les niveaux d'alphabétisme « élevés » et « faibles ». Les résultats obtenus ont été répartis en cinq niveaux et, pour nous, les niveaux d'alphabétisme élevés englobent les niveaux trois à cinq. L'atteinte du niveau trois suppose une capacité d'exécuter des tâches variées d'un certain degré de complexité. (On trouvera une description détaillée du matériel utilisé pour les tests ainsi que de la définition des niveaux d'alphabétisme dans Statistique Canada, 1996.)

La majeure partie de notre analyse porte sur la relation entre le niveau de scolarité atteint par une personne (et certains des avantages qui s'y rapportent sur le marché du travail) et le capital intellectuel héréditaire, lequel est représenté ici par le niveau de scolarité de la mère ou du père du répondant ainsi que par la situation professionnelle du père. En ce qui a trait à l'activité de la mère, les données de l'EIA permettent uniquement de déterminer si celle-ci a déjà travaillé. Davantage de questions portaient sur les actifs des du père, en particulier sur sa profession et son secteur d'activité.



Aspects intergénérationnels de l'acquisition des capacités de lecture et de la scolarité

PATRICE DE BROUCKER ET LAVAL LAVALLÉE

Les niveaux de scolarité et de compétences sont d'importantes dimensions de la capacité qu'a une personne de s'intégrer à la société et d'y contribuer. Ces facteurs contribuent non seulement à déterminer la position sociale d'une personne, mais ils ont également une incidence sur l'économie, en améliorant à la fois les effectifs et la qualité de la main-d'œuvre. Or le profil d'études d'une personne est modelé par de nombreux facteurs, parmi lesquels la famille et le système d'éducation exercent un poids considérable. De fait, la politique en matière d'éducation s'avère, au plan des politiques sociales, un outil puissant pour influencer sur la formation du capital humain.

Dans ce chapitre, nous évaluons le rôle de la famille dans l'acquisition de capacités de lecture et d'un niveau de scolarité élevés. En termes plus précis, nous cherchons à définir le rapport qui existe entre, d'une part, le niveau de scolarité d'une personne, ses capacités de lecture et ses caractéristiques vis-à-vis du marché du travail et, d'autre part, le niveau de scolarité des parents et les liens entre les parents et les enfants sur plus d'une génération et, de ce fait, de nous pencher sur les questions suivantes :

- [1] Le capital intellectuel des familles se transmet-il d'une génération à l'autre; le profil de mobilité en regard de l'éducation a-t-il changé au fil des ans?
- [2] Les capacités de lecture sont-elles reliées au niveau de scolarité et jouent-elles un rôle dans la mobilité scolaire et dans l'accès à la formation?
- [3] L'expérience du marché du travail des parents influence-t-elle sur leur capacité de transmettre leur capital intellectuel à leurs enfants?

- [4] Les capacités de lecture améliorent-elles les perspectives d'emploi?
- [5] Le niveau de scolarité des parents influence-t-il sur les stratégies qu'ils utilisent pour influencer leurs enfants dans leurs études?

Notre analyse part du principe selon lequel les niveaux de scolarité et d'alphabétisme sont d'importants déterminants de la facilité avec laquelle les gens s'intègrent aux différentes facettes de la société et déterminent aussi largement quelles sont les personnes les plus susceptibles de mener une vie professionnelle fructueuse. Nous insistons également sur l'importance de l'accès à la formation continue, toute la vie durant (pour parfaire ses connaissances et des compétences), pour maintenir et améliorer sa situation socio-économique et son bien-être économique global. La scolarité est acquise principalement en franchissant les différentes étapes du système de l'éducation; cependant, elle dépend également du capital intellectuel héréditaire, lequel est en grande partie acquis à la maison, par le biais des interactions entre les membres de la famille. Ces interactions exercent un effet direct sur le rendement scolaire, en créant un contexte propice à l'apprentissage. Le capital intellectuel, qui se développe au sein des familles au fil des générations, exerce également un effet indirect sur le niveau de scolarité. Le capital intellectuel se définit comme l'expérience et les connaissances, qui sont acquises par une personne ou un groupe de personnes (par exemple une famille) durant leur vie et qui peuvent être appliquées à la poursuite d'objectifs économiques et sociaux. D'une part, ce capital peut ouvrir la voie à des études plus poussées et à une vie adulte plus fructueuse. D'autre part, une telle notion suppose également que les enfants ne sont pas tous sur un pied d'égalité, lorsqu'ils commencent leurs études. Aussi le rôle d'un système d'éducation efficace est-il de fournir aux

THOMAS, Duncan (1990). « Intra-Household Resource Allocation: An Inferential Approach. » *Journal of Human Resources*. Vol. 25, 635-64.

WEISSMAN M., P. LEAF et J.L. BRUCE (1987). « Single Parent Women. » *Social Psychiatry*. Vol. 22, 29-36.

*Econometrica*. Vol. 50, 1-25.

WHITE, H. (1980). « A Heteroskedasticity-Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity. »

MUNROE BLUM H., M.H. BOYLE et D.R. OFFORD (1988). « Single-Parent Families: Child Psychiatric Disorder and School Performance. » *Journal of the American Academy of Child and Adolescent Psychiatry*. Vol. 27, 214-19.

OFFORD, D.R. et K. BENNETT (1994). « Conduct Disorder: Long-term Outcomes and Intervention Effectiveness. » *Journal of the American Academy of Child and Adolescent Psychiatry*; 33: 1069-1078.

OFFORD, D.R., M.H. BOYLE et B.R. JONES (1987). « Psychiatric Disorder and Poor School Performance Among Welfare Children in Ontario. » *Canadian Journal of Psychiatry*; 32:518-525.

OFFORD D.R., M.H. BOYLE, Y.A. RACINE et coll. (1992). « Outcome, Prognosis and Risk in a Longitudinal Follow-up Study. » *Journal of the American Academy of Child and Adolescent Psychiatry*. Vol. 31, 916-23.

OFFORD D.R., M.H. BOYLE et P. SZATMARI (1987). « Ontario Child Health Study: II. Six-month Prevalence of Disorder and Rates of Service Utilization. » *Archives of General Psychiatry*. Vol. 44, 832-36.

OFFORD, D.R. et E.L. LIPMAN (1996). « Problèmes affectifs et comportementaux » Dans *Grandir au Canada*. Ottawa: Statistique Canada, n° 89-550-MPF au catalogue, n° 1.

PHIPPS, Shelley et Peter BURTON (1992). « What's Mine Is Yours? The Influence of Male and Female Incomes on Patterns of Household Expenditure. » Document de travail n° 92-12, Department of Economics, Dalhousie University.

RUTTER, M. (1992). « Adolescence as a Transition Period: Continuities and Discontinuities in Conduct Disorder. » *Journal of Adolescent Health*. Vol. 13, 451-60.

SAIGAL, S. et P. SZATMARI (1991). « Cognitive Abilities and School Performance of Extremely Low Birth Weight Children and Matched Term Control Children at Age Eight Years: A Regional Study. » *Journal of Pediatrics*. Vol. 118, 751-60. SCHULTZ, T. Paul (1990). « Testing the Neoclassical Model of Family Labor Supply and Fertility. » *Journal of Human Resources*. Vol. 25, 599-634.

KINGSTON-RIECHERS, JoAnn (1997). « Does the Frequency of Domestic Abuse Affect the Decision to Divorce? » Document de travail, Department of Economics, McMaster University.

LAROCHE, Mireille (1997). « The Persistence of Low Income Spells in Canada, 1982-1993. » Division des études économiques et de l'analyse de politiques, Département des Finances.

LIPMAN, E.L. et D.R. OFFORD (1997). « Psychosocial Morbidity Among Poor Children in Ontario. » Dans G. Duncan, J. Brooks-Gunn (dir.) *Growing Up Poor*. New York: Russell Sage Foundation.

LIPMAN, E.L. et D.R. OFFORD (1994). « Les enfants défavorisés. » Dans *Guide canadien de médecine clinique préventive*. Groupe d'étude canadien sur l'examen médical périodique. Ottawa: Santé Canada, n° H21-117/1994F au catalogue.

LIPMAN, E.L., D.R. OFFORD et M.H. BOYLE (1997). « Single Mothers in Ontario: Socio-Demographic, Physical and Mental Health Characteristics. » *Canadian Medical Association Journal*. Vol. 156, 639-45.

LIPMAN, E.L., D.R. OFFORD et M.H. BOYLE (1994). « Economic Disadvantage and Child Psycho-Social Morbidity. » *Canadian Medical Association Journal*. Vol. 151, 431-37.

LIPMAN, E.L., D.R. OFFORD et M.D. DOOLEY (1996). « Que savons-nous des enfants de familles dirigées par une mère seule ? Questions et réponses tirées de l'Enquête longitudinale sur les enfants et les jeunes. » *Grandir au Canada*. Ottawa: Statistique Canada, n° 89-550-MPF au catalogue.

LIPMAN E.L., D.R. OFFORD, M.H. BOYLE, M. WONG et R. MAZUMDAR (1996). « Socio-Mental Health Characteristics of Single Mothers in Ontario: Results from the Ontario Health Supplement. » Non publié.

MOILANEN I. et P. RANTAKALLIO (1988). « The Single Parent Family and the Child's Mental Health. » *Social Science and Medicine*. Vol. 27, 181-86.



## Bibliographie

- ACHENBACH, T. et C. EDELBROCK (1981). « Behavioral Problems and Competencies Reported by Parents of Normal and Disturbed Children Aged 4 Through 16. » *Monographs of the Society for Research in Child Development*. Vol. 46, 1-78.
- AVISON, W.R. et C.F. THORPE (1993). « Family Structure and Maternal Mental Health: Single Parenthood and Other Risk Factors. » Communication présentée au 1993 American Public Health Association Annual Meetings. San Francisco, California.
- BOYLE, M.H., D.R. OFFORD et H.G. HOFMANN (1987). « Ontario Child Health Study: I. Methodology. » *Archives of General Psychiatry*. Vol. 44, 826-831.
- BROWNING, Martin B., François BOURGUIGNON, Pierre-André CHIAPPORI et Valérie LECHENE (1994). « Incomes and Outcomes: A Structural Model of Intra-Household Allocation. » *Journal of Political Economy*. Vol. 102, 1067-96.
- CADMAN, D., M.H. BOYLE, D.R. OFFORD, P. SZATMARI, N.I. RAE-GRANT, J. CRAWFORD et J. BYLES (1986) « Chronic Illness and Functional Limitation in Ontario Children: Findings of the Ontario Child Health Study. » *Canadian Medical Association Journal*. 135:761-767.
- COSTELLO, E.J. (1989) « Developments in Child Psychiatric Epidemiology. » *Journal of the American Academy of Child and Adolescent Psychiatry* 28, 836-841.
- CURTIS, Lori (1997). « Single Parenthood and Health Status. » Document de travail, Department of Economics, McMaster University.
- CURTIS, Lori, M. DOOLEY, E. LIPMAN et D. FEENY (1996). « Child Health and Family Socioeconomic Status: Application of the Health Utilities Index to the Ontario Child Health Study. » Document de travail, Department of Economics, McMaster University.
- DOOLEY, Martin (1996). « The Evolution of Welfare Participation Among Canadian Lone Mothers from 1973-1991. » Document de travail n° 96-02, Department of Economics, McMaster University.
- DOOLEY, Martin (1995). « Lone Mother Families and Social Assistance in Canada. » Dans *Family Matters: New Policies for Divorce, Lone Mothers and Child Poverty*. Toronto: C.D. Howe Institute.
- DOOLEY, Martin (1994a). « The Converging Market Work Patterns of Married Mothers and Lone Mothers in Canada. » *Journal of Human Resources*. Vol. 29, 600-20.
- DOOLEY, Martin (1994b). « Women, Children and Poverty in Canada » *Canadian Public Policy*. Vol. 20 430-43.
- DOOLEY, Martin et E.L. LIPMAN (1996). « Child Psychiatric Disorders and Poor School Performance: The Roles of Family Type, Maternal Market Work and Low Income. » Dans *Towards the XXIst Century: Emerging Sociodemographic Trends and Policy Issues in Canada*. Actes d'une conférence de la Fédération canadienne de démographie.
- DUMOUCHEL, W.H. et G.J. DUNCAN (1983). « Using Sample Weights in Multiple Regression Analysis of Stratified Samples. » *Journal of American Statistical Association*. Vol. 78, 535-43.
- DUNCAN, G. et J. BROOKS-GUNN (dir.) (1997). *Consequences of Growing Up Poor*. New York: Russell Sage Foundation.
- EVANS, Robert et Gregory STODDART (1990) « Producing Health, Consuming Health Care. » *Social Science and Medicine*. Vol. 31, 1347-63.
- GROSSMAN, Michael (1972). « On the Concept of Health Capital and the Demand for Health. » *Journal of Political Economy*. Vol. 80, 223-55.
- GROSSMAN, M. et Theodore JOYCE (1989). « Socioeconomic Status and Health: A Personal Research Perspective. » Dans Deanna S. Gomer et Barbara H. Kehrer (dir.) *Paths to Health: The Role of Social Factors*. Mento Park: The Henry J. Kaiser Family Foundation.
- JUDGE K. et M. BENZEVAT (1993). « Health Inequalities: New Concerns About the Children of Single Mothers. » *British Medical Journal*. Vol. 306, 677-80.
- KELLAM S.G., M.E. ENSMINGER et J. TURNER (1977). « Family Structure and the Mental Health of Children: Concurrent and Longitudinal Community-Wide Studies. » *Archives of General Psychiatry*. Vol. 34, 1012-22.

14 Le revenu est inférieur à 20 000 \$ pour 13 % de l'échantillon. Ainsi qu'on peut le constater au tableau 7.2, 14 % des enfants ont un « très faible revenu » et 22 % un « faible revenu ». Environ 80 % de ceux dont le revenu est inférieur à 20 000 \$ se caractérisent aussi par un « très faible revenu » et vice versa. Presque tout ceux qui gagnent moins de 20 000 \$ se rangent dans la catégorie « faible revenu », mais 60 % seulement des familles à faible revenu ont aussi un revenu inférieur à 20 000 \$. Les deux cinquièmes des enfants dont la famille recevait moins de 20 000 \$ vivaient avec leurs deux parents et le reste, uniquement avec leur mère.

15 L'échantillon s'est sensiblement érodé entre l'ESSEO originale et l'enquête de suivi de 1987. Le nombre de mères seules qui se retrouvaient à la fois dans l'échantillon de 1983 et dans celui de 1987 était inférieur à 100, à cause de cette érosion ou d'une modification de la situation conjugale.

16 Il se pourrait aussi que la propension des enseignants et des directeurs d'école à coller un échec à un élève d'un niveau donné varie avec la province, bien que l'incidence de ce problème soit virtuellement la même pour les enfants ontariens de l'ELNEJ (4 %) et ceux de l'échantillon national (5 %).

17 Nous avons aussi estimé les logits du tableau 7.7 avec l'échantillon national et inclus une variable nominale égale à un quand l'enfant venait de l'Ontario. Le coefficient estimatif de cette variable n'était pas significatif pour les troubles psychiatriques, était significativement négatif pour la reprise de l'année scolaire et significativement positif pour les problèmes sociaux.

18 L'approche de Lipman, Offord et Dooley diffère de la nôtre à d'autres égards que les seuils employés. Ainsi, elle exclut les observations où la mère n'était pas la PMI. D'autre part, les seules variables indépendantes utilisées dans l'analyse multivariée étaient la monoparentalité et le faible revenu.

19 Soulignons que l'un ou l'autre seuil donne une prévalence de 10 % pour les troubles affectifs avec l'échantillon de l'ELNEJ. Pour vérifier la sensibilité de ce résultat, nous avons utilisé un autre seuil employé dans les études sur l'ESSEO pour les troubles affectifs. Avec cet autre seuil, 17 % des enfants de l'ELNEJ éprouvaient des troubles affectifs, mais les estimations multidimensionnelles restent fort semblables, peu importe le seuil retenu.

10 Par « statistiquement significatif », nous entendons habituellement une valeur  $p$  de 0,05 ou moins. « Faiblement significatif » se rapporte habituellement à une valeur  $p$  située entre 0,10 et 0,05.

11 On ne peut habituellement réfuter l'hypothèse que la somme du coefficient du faible revenu et du terme d'interaction est différente de zéro à cause de l'importante erreur-type du terme d'interaction.

12 Nous avons aussi estimé les modèles à logit avec plusieurs mesures différentes des difficultés sociales et scolaires. Une autre mesure des difficultés scolaires est que l'enfant reçoit un enseignement spécial à cause de problèmes physiques, affectifs, comportementaux ou autres limitant le genre ou la somme de travail scolaire qu'il peut effectuer. Sept pour cent des enfants suivent des cours spéciaux. Une seconde mesure a trait à la mention, par le parent, que l'enfant obtient des résultats moyens ou inférieurs à la moyenne (« mauvais » ou « très mauvais ») à l'école. Vingt-cinq pour cent des enfants satisfaisaient ce critère. Dans le cas des problèmes sociaux, l'indication par le parent que l'enfant éprouve « parfois » ou plus fréquemment (« souvent » ou « toujours ») de la difficulté à s'entendre avec ses parents, ses pairs ou ses enseignants. Vingt-trois pour cent des enfants répondent à ce critère. Les coefficients de la monoparentalité présentent d'importants effets marginaux et un ratio élevé dans tous les cas. Par ailleurs, les coefficients du faible revenu ne sont pas significatifs ( $p > 0,05$ ) et se traduisent par de plus petits effets marginaux que les coefficients de la monoparentalité.

13 Nous nous sommes aussi penchés sur l'efficacité prédictive des estimations. Nos coefficients prévoient l'« absence de problèmes » pour la quasi-totalité des dénouements et des observations, en ce sens que la probabilité théorique est inférieure à 50 %. En vertu de ce sens restreint, nos modèles aboutissent à de « bons » résultats puisque 10 % des enfants de l'échantillon ou moins connaissent réellement chacun des problèmes. Un autre test consiste à déterminer si la probabilité théorique moyenne de chaque dénouement diffère pour [1] les enfants effectivement au prises avec un problème et [2] ceux qui en réchappent. Pour chaque dénouement, la moyenne du groupe [1] dépasse ( $p < 0,01$ ) celle du groupe [2].



susciteraient des problèmes de santé aussi graves chez l'enfant pourrait aussi agir sur la probabilité d'une séparation, d'un divorce ou d'un remariage. Malheureusement, on ne peut guère remédier à cette difficulté sans variables identificatrices qui permettraient de créer un modèle structural plus juste. L'approche que nous avons adoptée ressemble donc davantage à une méthode autorisant l'exploration de la distribution combinée des variables qui, selon nous, pré-sentent une certaine importance dans le processus conditionnant la santé et le développement de l'enfant.

Notes

Les auteurs remercient Statistique Canada, le Programme national de recherche et de développement en matière de santé, le Conseil de recherches en sciences humaines, la Fondation internationale de la santé mentale et le *Canadian International Labour Network* pour leur aide. Ils tiennent à souligner les remarques fort judicieuses dont leur ont fait part Miles Corak et deux évaluateurs anonymes. Les opinions exprimées dans ce document n'engagent que les auteurs et ne devraient en aucun cas être attribuées à Statistique Canada.

<sup>1</sup> Après dépouillement des ouvrages de sciences sociales, nous avons constaté que l'expression « structure familiale » désignait couramment le nombre de parents dans la famille. On pourrait en conclure que le nombre de parents résidents constitue la principale source de variation de la structure familiale pour les familles contemporaines qui comptent des enfants à charge. Nous n'avons pas encore découvert une expression plus spécifique mais aussi succincte.

<sup>2</sup> En réalité, 25 % seulement des PMI signalent des résultats « moyens » ou inférieurs à la moyenne pour leurs enfants. L'emploi de cette autre mesure est abordé plus loin dans le chapitre.

<sup>3</sup> Les rapports des enseignants du cycle un de l'ELNEJ pourraient brosser un tableau différent. Une autre étude au moins indique que les enseignants s'avèrent moins généreux que les parents lorsqu'ils évaluent les progrès scolaires de l'enfant. Saigal et Szatmari (1991) ont examiné un échantillon de contrôle d'enfants nés à terme dans le cadre d'une enquête de suivi de longue haleine sur des enfants à faible poids de naissance. Selon les parents, 4 % seulement de ces enfants

affichaient de « piètres » résultats scolaires, tandis que les enseignants fixaient le pourcentage à 17 %. En dépit de la petite taille de l'échantillon (145 enfants de 8 ans), on en conclut que les rapports des enseignants de l'ELNEJ doivent être minutieusement examinés, lorsqu'ils sont disponibles.

<sup>4</sup> Vingt-trois pour cent des PMI rapportent que leur enfant éprouve « parfois », « souvent » ou « toujours » de la difficulté à s'entendre avec ses parents, ses pairs ou ses enseignants. Nous parlons de l'emploi de cette autre mesure des problèmes sociaux plus loin dans ce chapitre.

<sup>5</sup> Les économistes ont tendance à se servir de la fonction probit avec probabilité conditionnelle et à en analyser les implications en matière de politiques d'après la variation de la probabilité théorique obtenue pour la variable dépendante. Les chercheurs de la santé se servent plutôt de la fonction logistique avec probabilité conditionnelle et parlent des conséquences en matière de politiques selon le risque relatif. Le compromis retenu par notre équipe multidisciplinaire était d'utiliser la fonction logit avec probabilité conditionnelle et de discuter des répercussions sur les politiques à partir de la variation de la probabilité théorique de la variable dépendante.

<sup>6</sup> Comme on pourra le voir d'après nos estimations multidimensionnelles, les enfants de 8 à 11 ans des familles défavorisées qui ne vivent qu'avec leur mère ont tendance à connaître plus de difficultés. Les filles, en revanche, semblent en éprouver moins. On ignore donc si l'absence de telles observations relèverait ou diminuerait le pourcentage global d'enfants aux prises avec les divers problèmes indiqués au tableau 7.1.

<sup>7</sup> Pour inclure pareilles observations à l'échantillon utilisé pour l'estimation, il faut attribuer une valeur spécifique à la « valeur manquante » de la variable concernée. Nous avons retenu la valeur nulle.

<sup>8</sup> La même remarque est valable quand on remplace les variables du travail rémunéré de la mère dans les cas relativement rares où le père est la PMI.

<sup>9</sup> Les tableaux 7.3 et 7.4 présentent les estimations obtenues avec les données pondérées et la principale variable du faible revenu (revenu sous le SFR de 1992). Le tableau 7.5 illustre les effets de l'emploi de données non pondérées ou d'une autre mesure du faible revenu.



familial, dont la valeur maximale est fixée à 40 000 \$ et plus pour les mères seules et à 60 000 \$ et plus pour les couples. Le fichier indique la taille de la famille mais pas celle de la ville, en sorte qu'il est impossible d'estimer le SFR de la famille. Nous avons essayé deux autres mesures de faible revenu. En vertu de la première, une famille est dite à **très faible revenu** **ou très défavorisée** quand le revenu familial est inférieur à 75 % du SFR de 1992. La seconde, que nous n'avons utilisée que dans les analyses multivariées, fait appel à une variable nominale égale à un quand le revenu global de la famille est inférieur à 20 000 \$, le nombre de membres du ménage étant contrôlé. Nos estimations multidimensionnelles du lien entre le faible revenu et les problèmes que connaissent les enfants s'avèrent très sensibles à la mesure du faible revenu ce qui, à notre avis, souligne la nécessité de désagréger davantage l'information.

Le nombre restreint de données sur le revenu n'est pas la seule difficulté. En effet, nous ne disposons pour l'instant que d'une seule année de données. Nos mesures du faible revenu nous interdisent donc de faire la distinction entre les brèves et les longues périodes de faible revenu, dont les effets sur la santé et le développement de l'enfant pourraient s'avérer très différents. L'absence d'une telle information pourrait affecter l'estimation des coefficients d'autres variables que la faiblesse du revenu. Nous soupçonnons notamment que l'impact estimatif de la monoparentalité traduit au moins en partie un effet permanent du revenu, bref la réalité que les mères seules traversent des périodes de pauvreté plus longues que les couples (Laroche 1997). La même remarque pourrait s'appliquer à d'autres variables de l'analyse multidimensionnelle, comme la scolarité des parents. Les données des cycles ultérieurs de l'ELNEJ nous en apprendront davantage à ce sujet.

Plusieurs autres variables entrent dans notre analyse multidimensionnelle, notamment l'âge et le sexe de l'enfant, ainsi que l'âge, la scolarité et le travail rémunéré de la PMI. Enfin, nos analyses supposent implicitement que les paramètres socio-économiques comme le revenu et la structure de la famille interviennent au niveau de la santé et de la scolarité de l'enfant. Il se pourrait toutefois qu'il existe un effet de causalité contraire dans certains cas. Ainsi, de graves problèmes de santé durant l'enfance pourraient réduire le revenu familial en limitant la somme de travail rémunéré que peut accomplir un parent, voire les deux. Le stress que

parent, on entend un parent biologique, par alliance ou adoptif. Tel qu'indiqué précédemment, 98 % des enfants canadiens vivent dans une famille de l'un ou l'autre type. Nous ne connaissons que la situation familiale actuelle de l'enfant, ce qui pourrait, dans certains cas, brosser un tableau inexact de la ou des structures familiales dans lesquelles l'enfant a grandi.

La principale variable du revenu que nous avons utilisée est la mesure classique du faible revenu. Plus précisément, une famille est dite à **faible revenu ou défavorisée** si son revenu se situe sous le seuil de faible revenu (SFR) de 1992 de Statistique Canada. Nous avons retenu cette mesure parce qu'elle est la plus couramment employée dans les analyses courantes de la distribution du revenu au Canada. Sa valeur dépend à la fois de la taille de la famille et de la région où vit celle-ci. Les SFR sont périodiquement révisés en fonction de la part du revenu que la famille moyenne doit dépenser pour se procurer les nécessités de la vie. L'année des SFR (1992 en ce qui concerne l'ELNEJ) correspond à l'année de référence de l'Enquête sur les finances des consommateurs qui a servi à établir le jeu de SFR.

Nous avons concentré notre attention sur la faiblesse du revenu parce que bon nombre des études mentionnées à la section 1 (surtout celles de l'ESCO) mettent en relief une relation non linéaire entre le revenu familial et la santé de l'enfant. Cette association est la plus forte aux niveaux de revenu les plus faibles. Une autre raison est que, récemment, les débats sur les politiques publiques relatives aux enfants tournent autour de propositions axées sur le revenu, par exemple une prestation pour enfants fédérale plus généreuse en vue de réduire l'incidence de faible revenu chez les familles comptant des enfants. Nous voulons explorer les conséquences éventuelles de telles propositions sur le plan de la santé. La troisième raison, sans doute la plus convaincante, demeure que les données sur le revenu du fichier à grande diffusion de l'ELNEJ s'avèrent très limitées. Plus précisément, le fichier ne renferme pas la mesure continue du revenu familial, le SFR de la famille ni leur ratio. Une des mesures du revenu offertes avec le fichier à grande diffusion divise le ratio du revenu familial et des besoins familiaux (SFR de 1992) en six catégories, la plus basse étant de 0,75 ou moins et la plus haute, de 1,25 ou plus. Notre mesure du faible revenu dérive de cette variable. Le fichier à grande diffusion comprend aussi une variable nominale pour le revenu

du trouble concerné quand la note dépassait un seuil précis. Nous nous sommes servis pour cela de deux jeux de seuils auxquels on avait déjà recouru lors de recherches antérieures. Le choix d'un seuil exerce peu d'influence sur les estimations multidimensionnelles. C'est pourquoi nous présentons une série d'estimations sous forme de tableaux et commentons les résultats obtenus au moyen du deuxième jeu, lorsqu'il y a lieu de le faire. Les résultats multidimensionnels relatifs aux troubles psychiatriques, en particulier, se révèlent beaucoup plus sensibles aux poids d'échantillonnage et à la mesure du faible revenu qu'aux seuils applicables aux troubles proprement dits.

Les estimations qui apparaissent aux tableaux de la section 2 reposent sur les seuils de l'Enquête sur la santé des enfants de l'Ontario (ESEO). Cette enquête, qui remonte à 1983, portait sur 3 294 enfants de l'Ontario et a fait l'objet d'un suivi en 1987. L'ELNEJ s'est fortement appuyée sur l'ESEO, notamment en ce qui concerne les troubles psychiatriques. Un spécialiste en pédopsychiatrie qui n'avait pas eu accès aux rapports des parents et des enseignants a aussi évalué en clinique un certain nombre d'enfants de l'ESEO, sélectionnés au hasard. Les seuils de l'ESEO ont été établis d'après la note qui assurait la plus grande concordance avec le diagnostic du spécialiste pour le trouble concerné. En d'autres mots, le seuil de l'ESEO correspond au point où l'existence d'un trouble se discerne le mieux de son absence, pour un pédopsychiatre. Boyle et ses collaborateurs (1987) donnent tous les détails de cette méthode.

Les questionnaires de l'ESEO et de l'ELNEJ étaient rédigés de façon semblable. Par ailleurs, si le nombre de questions posées aux parents à l'occasion des deux enquêtes était analogue, il n'était pas identique. L'ESEO, par exemple, comprenait 15 questions sur les troubles des conduites pour une note maximale de 30 (15 fois 2). Le seuil retenu pour l'ESEO était égal à neuf, soit 30 % du maximum de 30. Dans l'ELNEJ, le maximum avait été fixé à 28 (14 fois 2), de sorte que le seuil de 30 % dans cette enquête s'établissait à 8,4. Nous avons analysé les données de l'ELNEJ en appliquant des seuils de huit et de neuf pour les troubles des conduites et avons obtenu des estimations multidimensionnelles très semblables. Celles reposant sur le seuil de huit apparaissent à la partie 2. Nous avons recouru à une méthode similaire afin de calculer l'équivalent des seuils de l'ESEO pour l'hyperactivité et les troubles affectifs dans l'ELNEJ. Lorsqu'on utilise ce jeu de seuils, on constate que 7 % des

enfants de l'échantillon sont hyperactifs, que 5 % connaissent un trouble des conduites et que 10 % souffrent d'un trouble affectif. Enfin, 16 % des enfants doivent composer avec un ou plusieurs de ces problèmes.

La deuxième série de seuils relatifs aux troubles à l'étude a été obtenue par sélection de la note qui permettrait de séparer la tranche supérieure de 10 % des 90 % restants de l'échantillon. Par définition donc, 10 % des enfants souffraient de chacun des troubles examinés. En vertu de ces seuils, 21 % des enfants présentent un ou plusieurs troubles. Ces seuils sont identiques à ceux utilisés par Lipman, Offord et Dooley (1996)<sup>18</sup>. Les ouvrages mentionnent souvent des seuils débouchant sur un taux de prévalence de 5 % à 10 %. Cinq grandes études internationales, dont une canadienne (Costello 1989), sur l'épidémiologie des troubles psychiatriques des enfants confirment pareils taux (et nous avons appelé nos deux jeux « seuils de l'ESEO » et « seuils de 10 % », respectivement<sup>19</sup>.

Pour ce qui est des résultats scolaires, l'expression « **reprise d'une année** » se passe d'explications. On estime qu'un enfant éprouve des **difficultés à l'école** si la PMI rapporte de piètres ou de très piètres résultats, globalement. Ces deux indicateurs propres aux difficultés scolaires n'étaient disponibles que pour les enfants de 6 à 11 ans, puisque la majorité des enfants de 4 ou 5 ans ne vont pas encore à l'école.

Un enfant se heurte à des **problèmes sociaux** si, aux dires de la PMI, il avait souvent ou toujours éprouvé de la difficulté à s'entendre avec un autre enfant (ami, condisciple), les enseignants ou les parents au cours des six mois antérieurs. Cette variable s'appliquait aux enfants de 4 à 11 ans, mais nous ne nous en sommes servis que pour ceux de 6 à 11 ans, faute du point de vue de l'enseignant pour les enfants de 4 et de 5 ans.

Par « **un ou plusieurs problèmes** », on entend un ou plusieurs des cas suivants : un ou plusieurs troubles psychiatriques, des difficultés à l'école ou un problème social. Cette variable n'était définie que pour les enfants de 6 à 11 ans.

### Caractéristiques familiales

Nous avons pris pour définition de « **famille monoparentale** » un enfant vivant avec sa mère, en l'absence d'un conjoint ou d'un partenaire de fait. Le groupe de comparaison était constitué d'enfants vivant avec leurs deux parents. Par

Symptômes de l'hyperactivité, des troubles des conduites et des troubles affectifs dans l'Enquête longitudinale sur les enfants et les jeunes

Tableau 7A.1

Hyperactivité		Troubles des conduites		Troubles affectifs	
Ne peut rester en place, est agité/e ou hyperactif/ve		Détruit ses propres choses		Semble malheureux/se, triste ou déprimé/e	
Remue sans cesse		Se bagarre souvent		N'est pas aussi heureux/se que les autres enfants	
Se laisse distraire, a de la difficulté à poursuivre une activité quelconque		Démolit des choses qui appartiennent à sa famille ou à d'autres enfants		Est trop craintif/ve ou anxieux/se	
Est incapable de se concentrer, ne peut maintenir son attention pour une longue période		Lorsqu'un autre enfant lui fait mal accidentellement (par exemple en le bousculant), il/elle suppose que cet enfant l'a fait exprès et réagit avec colère		Est inquiet/ète	
Est impulsif/ve, agit sans réfléchir		Attaque physiquement les autres		Pleure beaucoup	
A de la difficulté à attendre son tour dans un jeu ou en groupe		Menace les autres		Est nerveux/se ou très tendu/e	
A de la difficulté à rester tranquille pour plus de quelques instants		Est cruel/le envers les autres, les brutalise et fait preuve de méchanceté		A de la difficulté à s'amuser	
Est inattentif/ve		Donne des coups de pied à d'autres enfants, les mord ou les frappe			
		Lorsqu'il/elle est fâché/e contre quelqu'un, essaie d'entraîner les autres à détester cette personne			
		Lorsqu'il/elle est fâché/e contre quelqu'un, dit de vilaines choses à son insu			
		Lorsqu'il/elle est fâché/e contre cette personne à quelq'un d'autre			
		Vole des choses dans la maison			
		Se livre au vandalisme			
		Vole des choses à l'extérieur de la maison			

L'exercice de violence physique contre des personnes ou des biens, ou un sérieux manquement aux normes sociales; enfin, les **troubles affectifs** se manifestent principalement sous forme d'anxiété et de dépression. La variable « **un ou plusieurs troubles psychiatriques** » se définit comme le cumul de plusieurs des troubles mentionnés ci-dessus.

La PMI devait indiquer si l'enfant ne présentait jamais (aucun) les symptômes du tableau 7A.1 ou les présentait parfois (quelques-uns) ou souvent (beaucoup). Les valeurs 0, 1 et 2 ont été respectivement attribuées à leurs réponses. On a ensuite additionné la valeur de la réponse à chaque question afin de coter les trois problèmes éventuels. On estimait que l'enfant souffrait



Annexe

Sélection de l'échantillon

L'ELNEJ compte 14 226 enfants de 4 à 11 ans. De ce nombre, nous avons retiré les suivants : huit enfants qui ne vivaient avec ni l'un ni l'autre parent (biologique, par alliance ou adoptif); 21 pour lesquels aucun des deux parents n'était la PMI; 195 vivant avec leur père seulement; 1 103 pour lesquels certaines valeurs manquaient à l'égard des variables dépendantes (résultats); et 164 pour lesquels les variables indépendantes (conditionnement) ne présentaient pas toutes les valeurs. Ces suppressions ont laissé un échantillon de 12 735 enfants de 4 à 11 ans. L'échantillon scolaire se compose de 9 283 enfants de 6 à 11 ans. Les enfants qui n'habitaient avec aucun de leurs parents ou pour lesquels la PMI ne correspondait à aucun des deux parents ont été exclus de l'échantillon parce qu'ils pourraient vivre au sein d'une famille à la structure très inhabituelle et (ou) temporaire. Ceux vivant uniquement avec leur père l'ont été également faute d'un nombre de cas suffisant pour une analyse distincte et parce que leurs paramètres socio-économiques (en particulier le revenu) diffèrent trop de ceux des mères seules pour justifier la création d'une catégorie commune « parent seul ». La majorité (90 %) des valeurs absentes se rapportaient à des variables dépendantes. À notre connaissance, il n'existe pas de solution statistique facile à un problème de ce genre.

Dénouements relatifs aux enfants

Ces dénouements concernaient le fonctionnement mental, scolaire et social des enfants. Leur choix et le choix des méthodes employées pour déceler l'existence d'un problème reposaient sur ce que l'on sait des multiples facettes d'un bon développement de l'enfant, sur les recherches antérieures concernant la santé psychosociale de l'enfant et sur les variables disponibles dans l'ELNEJ (Offord et coll. 1992, Offord et coll. 1987). Toutes les données émanant des rapports des parents, car Statistique Canada n'avait pas rendu publics les rapports des enseignants au moment de où nous avons entrepris nos travaux.

Le tableau 7A.1 énumère les symptômes retenus dans l'ELNEJ à l'égard de chaque trouble psychiatrique examiné, soit l'hyperactivité, les troubles des conduites et les troubles affectifs. En résumé, l'hyperactivité se caractérise par un manque d'attention, l'impulsivité et l'activité motrice; les troubles des conduites supposent

la mère et son conjoint. Parelles analyses s'avèrent particulièrement utiles une fois que les chercheurs auront accès à des données plus complètes sur la rémunération et le revenu de la famille et de chaque parent.

L'autre objectif de nos travaux consistait à comparer les estimations de 1993 reposant sur les données de l'ELNEJ avec celles de 1983 venant de l'Enquête sur la santé des enfants de l'Ontario pour cette province. De la comparaison, il ressort qu'en dix ans, les troubles psychiatriques semblent devenus plus courants, tandis qu'il est moins fréquent de doubler une année, en Ontario. Rien n'indique que la prévalence des problèmes sociaux a changé. Les estimations multidimensionnelles reposant sur les données de 1983 ne font ressortir aucune variation significative selon la situation familiale. Celles de 1993, en revanche, révèlent que les enfants de mères seules sont plus enclins à éprouver un trouble psychiatrique et à doubler une année scolaire. D'autre part, les enfants à faible revenu sont plus susceptibles que leurs contreparties à avoir repris une année en 1993. On n'observe pas ce phénomène avec les données de 1983.

Il se pourrait que des problèmes de mesure et la taille de l'échantillon expliquent ces constatations, mais cette possibilité n'est pas la seule. Une modification du niveau de revenu relatif des deux types de famille a-t-elle joué un rôle en la matière? Le taux de faible revenu n'a guère diminué, voire n'a pas du tout baissé, pour les familles monoparentales durant la période examinée, mais la même remarque vaut pour les jeunes couples avec des enfants (Dooly 1994a). On sait aussi qu'entre les deux enquêtes, les jeunes mères seules (de moins de 35 ans) sont devenues beaucoup plus susceptibles de n'avoir jamais connu le mariage et de recourir à l'aide sociale (Dooly 1996). Quelle influence un changement au niveau de ces caractéristiques et d'autres caractéristiques pourrait-il exercer sur la population de mères seules? Les familles de divers type n'ont-elles plus le même accès aux services qui peuvent les aider à composer avec divers troubles psychiatriques ou difficultés scolaires? A-t-on modifié les pratiques gouvernant la reprise de l'année scolaire de telle manière que les variations selon la situation familiale ou économique se sont accrues, advenant le cas où une telle éventualité se produise? Beaucoup d'autres études sur le premier cycle de l'ELNEJ et les cycles subséquents, ainsi que sur l'ESEO s'avèreront nécessaires si on désire jeter un peu de lumière sur ces interrogations et bien d'autres.

quantitatifs sur la probabilité théorique d'un trouble ou d'un problème. Par exemple, on associe la monoparentalité à une hausse de 14 % de la probabilité qu'un enfant connaisse un ou plusieurs des troubles ou des problèmes examinés. Une interprétation correcte de ce résultat s'avère cependant compliquée. Nous avons suivi la pratique courante qui consiste à comparer les enfants de familles monoparentales à ceux des familles biparentales. Est-ce approprié? Peut-être pas si un bon nombre ou la majorité des problèmes que connaissent les enfants de mère seules deviennent de la nature dysfonctionnelle de la famille biparentale dans laquelle ils vivaient auparavant. Le fait d'échapper à ce milieu pourrait avoir eu un effet bénéfique sur la santé et le développement des enfants concernés, et pas l'effet négatif qu'on pourrait déduire d'un examen superficiel d'estimations qui, somme toute, ne reposent que sur une analyse transversale.

En supposant même que nos estimations reflètent l'incidence d'une ou de plusieurs différences courantes entre les familles monoparentales et biparentales, laquelle s'avère la plus pertinente? Que les épisodes de faible revenu durent plus longtemps pour les familles monoparentales ou que ces dernières ne profitent pas d'une aide non pécuniaire des parents, des amis et des organismes de services sociaux? Les données des cycles ultérieurs de l'ELNEJ nous aideront à faire le tri parmi les interprétations possibles de cette très nette et constante relation empirique en établissant l'importance relative de chacune d'elles.

Nous avons aussi habituellement constaté que les problèmes à l'étude avaient une plus faible incidence chez les filles et couramment, mais pas toujours, découvrent une relation analogue chez les enfants dont la mère avait plus de 34 ans. En revanche, nous n'avons pu établir de lien solide entre les différents problèmes et la scolarité du parent. Seul le coefficient du paramètre « pas de diplôme d'études secondaires » présentait toujours le signe prévu mais, même alors, l'estimation n'était statistiquement significative que dans la moitié des cas environ.

Nous avons aussi testé une variable nominale indiquant si la mère avait ou non « travaillé toute l'année à temps plein » et une autre précisant si elle poursuivait ou non un travail rémunéré « une partie de l'année ou à temps partiel ». Les coefficients de ces deux variables n'ont jamais été significativement différents de zéro. Il convenait d'approfondir la question en recourant à d'autres mesures du travail rémunéré pour

Canada. Plus précisément, nous recourons à l'Enquête longitudinale nationale sur les enfants et les jeunes pour évaluer le lien entre diverses difficultés psychiatriques, scolaires et sociales et un assortiment de variables socio-économiques (dont le nombre, l'âge, le revenu, la scolarité et le travail rémunéré des parents ainsi que le sexe, le nombre et l'âge des enfants). Nous y analysons trois sortes de troubles psychiatriques: l'hyperactivité, les troubles des conduites et les troubles affectifs. Nos deux mesures de la réussite scolaire concernent la reprise ou non de l'année scolaire par l'enfant et la mention de difficultés ou de grandes difficultés à l'école par les parents. On estimait qu'il y avait un problème social quand l'enfant éprouvait « souvent » ou « toujours » de la difficulté à s'entendre avec d'autres enfants, les enseignants ou les parents. La prévalence d'un problème quelconque chez les enfants de l'échantillon n'a jamais dépassé 10 %, et 23 % des enfants étaient aux prises avec un de ces problèmes ou plusieurs.

Diverses conclusions intéressantes, parfois inattendues, ressortent des estimations multidimensionnelles que nous avons obtenues. En premier lieu, l'effet estimatif du faible revenu s'avère fort sensible à la mesure du revenu employée ainsi qu'à l'usage des poids de l'échantillon. Nous avons commencé avec ce qui nous semblait être l'approche la plus conventionnelle, c'est-à-dire l'utilisation de données pondérées assorties d'une variable nominale servant à indiquer si le revenu familial se situait ou non sous le seuil de faible revenu de 1992. Les coefficients du faible revenu résultants n'étaient significatifs que pour la reprise de l'année scolaire et de fréquentes difficultés sociales. Ils ne l'étaient pas pour les troubles psychiatriques ni une piètre réussite scolaire. L'emploi de données non pondérées ou d'une variable nominale pour un revenu familial de moins de 20 000 \$ cependant révèle une étroite association entre le faible revenu et tous les problèmes examinés, sauf l'hyperactivité. Le fichier à grande diffusion mis à notre disposition ne renfermait que très peu de précisions sur le revenu. Des données plus détaillées nous permettraient d'éclaircir davantage cet aspect capital en matière de politique publique.

Deuxièmement, la monoparentalité est étroitement liée à tous les dénouements illustrant la pauvreté ou presque. Les coefficients estimatifs de cette variable sont robustes à l'égard de la méthode d'estimation (pondération, seuils relatifs aux troubles, mesures du revenu) et soulignent parallèlement d'importants effets

Tableau 7.7  
Estimation de logits choisis pour l'Ontario, 1983 et 1993

	1983		1993	
	Très faible	Faible	Très faible	Faible
A. Un ou plusieurs troubles psychiatriques				
Mère seule	0,48	0,55	0,55	0,77
Très faible revenu	0,74	0,44	0,12	0,67
Mère seule x Très faible revenu	(2,2)	(1,6)	(0,6)	(2,5)
	-0,27	0,04	0,21	-0,60
	(0,4)	(0,1)	(0,5)	(1,5)
B. Reprise d'une année scolaire quelconque				
Mère seule	-0,23	1,1	1,1	1,6
Très faible revenu	-0,14	0,91	1,0	1,2
Mère seule x Très faible revenu	1,1	-0,33	-0,43	-1,3
	(1,0)	(0,4)	(0,5)	(1,8)
C. Fréquents problèmes sociaux				
Mère seule	-0,90	0,39	0,35	0,48
Très faible revenu	1,5	1,6	1,4	1,2
Mère seule x Très faible revenu	0,65	-0,49	-0,37	-0,52
	(2,9)	(3,8)	(4,1)	(3,3)
	(0,6)	(0,4)	(0,6)	(1,0)

Nota : (ratio 1). Données pondérées avec les seuils de l'ESCO. Contrôles pour l'âge et le sexe de l'enfant ainsi que l'âge et la scolarité de la mère inclus. Voir le tableau 7.6 pour la taille de l'échantillon et les sources des données.

probabilité de souffrir d'un trouble psychiatrique et de doubler une année est généralement plus grande pour les enfants vivant uniquement avec leur mère. Cette relation partielle n'était pas statistiquement significative en 1983. La même remarque vaut pour le revenu et la reprise de l'année scolaire. Un faible revenu implique des risques accrus de doubler l'année scolaire selon les données de 1993, mais pas celles de 1983. Les estimations multidimensionnelles relatives aux problèmes sociaux sont analogues pour les deux années. Les écarts qui se dégagent des résultats doivent-ils être attribués à un changement véritable des conditions dans lesquelles vivent les enfants de diverses couches socio-économiques en Ontario? Le lecteur se gardera

#### 4. Conclusion

de tirer trop de conclusions de ces premières constatations. Il se pourrait en effet que la variation entre les estimations de l'ESCO et de l'ELNEJ dérive principalement de problèmes de mesure et de la taille de l'échantillon. Outre ces mises en garde cependant, les résultats justifient la poursuite de recherches plus poussées.

Ce chapitre a pour but de nous aider à mieux saisir le rôle des paramètres socio-économiques dans la manifestation des troubles psychiatriques, des problèmes de rendement scolaire et des difficultés sociales chez les enfants du



Tableau 7.6  
Pourcentage d'enfants connaissant des difficultés psychiatriques,  
scolaires ou sociales: Ontario, 1983 et 1993

Simulation familiale et économique	Un ou plusieurs troubles psychiatriques	Reprise de l'année	Fréquents problèmes sociaux	1983				1993			
				Très faible revenu		Très faible revenu		Très faible revenu		Très faible revenu	
Mère seule (très défavorisée)	24	32	29	22	14	13	11	11	11	4	9
Mère seule non défavorisée	14	22	21	6	7	5	3	4	3	11	9
Couple (très) défavorisé	18	22	16	10	8	8	8	11	9	3	2
Couple non défavorisé	9	14	14	8	2	4	3	4	2	16	3 369
Total	11	16	9	22	14	13	11	4	9	2 450	1 084
Nombre d'observations	1 315	3 369	1 084	2 450	1 084	2 450	1 084	2 450	1 084	2 450	1 084

**Nota :** « Très faible revenu » signifie un revenu familial inférieur à 75 % du seuil de faible revenu (SFR) de 1992. Cette mesure se rapproche davantage du SFR de 1969 utilisé dans l'ESSEO.  
« Faible revenu » signifie un revenu familial inférieur au SFR de 1992.  
**Sources :** Données de 1983 de l'Enquête sur la santé des enfants de l'Ontario; données de 1994 de l'Enquête longitudinale nationale sur les enfants et les jeunes.

chaque cas, les enfants de sexe féminin, de moins de 8 ans, dont la mère a 35 ans ou davantage, courent clairement moins de risques de connaître un problème de ce genre. Le degré d'instruction de la mère n'exerce qu'une faible influence dans chaque cas.

La deuxième partie du tableau 7.7 donne l'estimation de la « reprise d'une année ». Ni la monoparentalité, ni la faiblesse du revenu ne semblent avoir d'importance dans les résultats de 1983. Dix ans plus tard cependant, ces deux paramètres sont étroitement associés à la probabilité de doubler une année dans la plupart des cas, mais surtout lorsque le revenu reste sous la marque des 20 000 \$. Le coefficient d'interaction indique que cet effet du revenu pourrait ne se faire sentir que sur les familles biparentales. Des résultats non présentés ici révèlent que la scolarité de la mère s'associe bien d'un coefficient significatif, à l'instar du sexe et de l'âge de l'enfant, selon les données de 1983. On pouvait généralement en dire autant des estimations de 1993 venant de l'ELNEJ.

Au volet C du tableau 7.7, on peut voir les estimations de logit concernant les enfants qui éprouvent « souvent ou constamment » de la

difficulté à s'entendre avec leurs parents, leurs pairs ou leurs enseignants. Le faible revenu se caractérise par un coefficient élevé et statistiquement significatif pour les quatre spécifications. Aussi intéressant et stable est le fait qu'aucun coefficient de la monoparentalité n'obtient une valeur p inférieure à 0,05. Il s'agit du seul cas où les données de l'ELNEJ, tant celles de l'Ontario que celles du Canada, n'indiquent pas une forte relation entre la monoparentalité et la probabilité d'un problème<sup>17</sup>. Des résultats non présentés ici révèlent que l'âge de la mère ainsi que l'âge et le sexe de l'enfant jouent toujours un rôle important dans les estimations de l'ELNEJ, mais pas dans celles de l'ESSEO. Les effets dus à la scolarité de la mère restent faibles dans les deux cas.

Quelles grandes différences discerne-t-on en comparant les données de l'ESSEO à celles de l'ELNEJ? Selon le tableau 7.6, la prévalence des troubles psychiatriques pourrait avoir augmenté et celle de la reprise de l'année scolaire pourrait avoir diminué entre 1983 et 1993, du moins en Ontario. Rien n'indique que la prévalence des difficultés sociales a changé. Les estimations multidimensionnelles de 1993 qui apparaissent au tableau 7.7 révèlent que la

l'ESCO constitue une bonne approximation de la situation économique de la famille selon le SFR de 1969 de Statistique Canada. Les SFR de 1992 utilisés dans le cadre de l'ELNEJ dépassent sensiblement ceux de 1969 (en dollars réels). Ainsi qu'on l'explique à l'annexe, la meilleure approximation de l'ELNEJ est un revenu familial inférieur à 75 % du SFR de 1992 (« très faible revenu »). En troisième lieu, la taille des échantillons diffère. Celui de l'ESCO comptait 1 315 enfants de 4 à 11 ans et 1 084 de 6 à 11 ans. On prendra surtout soin de ne pas perdre de vue le petit nombre d'enfants vivant avec uniquement avec leur mère (110 de 4 à 11 ans et 99 de 6 à 11 ans) car l'échantillon ontarien de l'ELNEJ comprenait 3 105 enfants de 4 à 11 ans et 2 273 de 6 à 11 ans. Enfin, le nombre de questions posées en vue d'évaluer les problèmes psychiatriques n'était pas exactement le même dans les deux cas (voir l'annexe).

Le tableau 7.6 indique la proportion d'enfants aux prises avec un des trois problèmes qui suivent, dans les deux enquêtes : un ou plusieurs troubles psychiatriques (hypervactivité, troubles des conduites, troubles affectifs), reprise d'une année scolaire quelconque, difficultés fréquentes à s'entendre avec ses pairs, ses parents ou ses enseignants. Les chiffres de l'ELNEJ se rapportant aux enfants ontariens sont semblables à ceux de l'échantillon national de l'enquête qui appaaraissent au tableau 7.1, à deux exceptions : 5 % des enfants de l'ELNEJ vivant avec leur mère seulement et dont le revenu dépassait le seuil de faible revenu en Ontario avaient doublé une année, contre 9 % pour l'échantillon national; par ailleurs, 9 % des enfants de l'ELNEJ issus de couples ontariens à faible revenu éprouvaient de fréquents problèmes sociaux, comparativement à 5 % pour l'échantillon national.

À l'avant-dernière rangée du tableau 7.6, on constate que le pourcentage d'enfants aux prises avec des troubles psychiatriques est passé de 11 % dans l'ESCO à 16 % dans l'ELNEJ-Ontario. Cette hausse entre les deux enquêtes vaut pour toutes les situations familiales et économiques, sauf les enfants des couples défavorisés, selon le SFR de 1992. La hausse est plus marquée pour les enfants de familles monoparentales que pour ceux des couples. Néanmoins, ainsi qu'on l'a précisé plus haut, les troubles psychiatriques n'ont pas été jugés au moyen du même nombre de questions. L'écart pourrait refléter cette variation.

Le pourcentage d'enfants qui ont doublé une année a régressé de 9 % à 4 % entre 1983 et 1993. La question posée était identique dans les deux enquêtes. À notre avis, cette tendance à la baisse pourrait traduire avant un changement dans la propension des enseignants et des directeurs d'école à contraindre les élèves à reprendre leur année qu'une véritable amélioration du rendement scolaire<sup>6</sup>. Il nous est néanmoins impossible d'expliquer pourquoi la baisse est plus importante pour les enfants de mères seules défavorisées et des couples à revenu plus élevé. Les questions qui devaient servir à déceler un « problème social » étaient les mêmes dans les deux cas, tout comme le pourcentage global d'enfants aux prises avec une telle difficulté (4 %). Il ne semble en outre pas y avoir de variation majeure entre les deux enquêtes dans l'incidence des problèmes sociaux, selon la situation familiale et la situation économique.

On trouvera au tableau 7.7 les résultats des modèles à logit pour chacune des trois variables dépendantes (même jeu de variables indépendantes qu'aux tableaux 7.3 et 7.4). Ce tableau donne les coefficients de la monoparentalité, du faible revenu et de l'interaction entre ces deux variables. Les estimations issues de trois mesures distinctes du revenu sont indiquées pour l'ELNEJ-Ontario. Nous avons retenu celle du très faible revenu, car c'est elle qui se rapproche le plus de l'unique mesure du faible revenu utilisée dans l'ESCO. Nous avons retenu un revenu inférieur à 20 000 \$ à cause de son impact sur les données nationales de l'ELNEJ.

Voyons d'abord les estimations du volet A du tableau 7.7 concernant l'existence d'un ou de plusieurs troubles psychiatriques. Les coefficients de la monoparentalité présentent tous le même ordre de grandeur, mais le ratio t des estimations de 1993 est beaucoup plus élevé, si- gne, peut-être, de la plus grande taille de l'échantillon. Le coefficient du faible revenu de 1983 est à la fois important et très significatif. Comme pour l'échantillon national, les coefficients du faible revenu de l'ELNEJ-Ontario manquent de robustesse. Seul un revenu inférieur à 20 000 \$ fournit une estimation d'importance et de signification analogues à celle de l'ESCO. L'interaction des variables n'est significative dans aucun cas, bien que celle associée à un revenu inférieur à 20 000 \$ puisse indiquer un écart entre les enfants des couples et des mères seules, comme c'est le cas pour l'échantillon national de l'ELNEJ. Les quatre séries d'estimations de logits concernant les troubles psychiatriques sont fort semblables à tous les autres égards. Dans

Tableau 7.5  
Estimations de logits choisis reposant sur des données non pondérées  
et une autre mesure du faible revenu

Autre mesure (pondérée) Revenu du ménage inférieur à 20 000 \$	Données non pondérées au SFR de 1992		à 20 000 \$	
	Mère Faible seule x revenu	Mère Faible seule x revenu	Mère seule Revenu inférieur à 20 000 \$	Mère seule x Revenu inférieur à 20 000 \$

Hyperactivité	0,77 (4,2)	0,17 (1,3)	-0,15 (0,63)	0,68 (3,2)	0,35 (1,3)	-0,44 (1,2)
Troubles des conduites	0,64 (4,1)	0,31 (2,8)	0,05 (0,24)	0,99 (4,8)	0,37 (1,8)	-0,35 (1,1)
Troubles affectifs	0,67 (4,9)	0,24 (2,5)	-0,09 (0,52)	0,72 (3,8)	0,65 (3,3)	-0,47 (1,7)
Un ou plusieurs troubles psychiatriques	0,66 (5,8)	0,22 (2,7)	-0,04 (0,23)	0,71 (4,4)	0,51 (3,2)	-0,33 (1,4)
Année doublée	0,63 (3,0)	0,50 (3,8)	-0,08 (0,30)	1,2 (4,3)	0,70 (2,9)	-0,68 (1,8)
Piètre réussite scolaire	0,76 (3,0)	0,13 (0,71)	0,0007 (0,002)	0,78 (2,7)	0,99 (2,9)	-0,33 (0,71)
Fréquents problèmes sociaux	0,68 (2,6)	0,56 (3,1)	0,05 (0,16)	0,69 (2,3)	1,4 (4,3)	-0,63 (1,3)
Un ou plusieurs problèmes quelconques	0,65 (5,5)	0,27 (3,4)	0,06 (0,41)	0,82 (4,8)	0,57 (3,3)	-0,30 (1,2)

Nota : (ratio t). Nombre d'observations : 12 735 enfants de 4 à 11 ans pour les troubles psychiatriques et 9 283 enfants de 6 à 11 ans pour les problèmes sociaux et scolaires. Les modèles incluaient tous les facteurs de régression des tableaux 4 et 5, c.-à-d. scolarité et âge de la PMI, âge et sexe de l'enfant, nombre d'enfants dans la famille.

### 3. Évolution de la situation en Ontario

Dans cette section, nous comparerons les estimations de l'Enquête sur la santé des enfants de l'Ontario au sous-échantillon ontarien de l'ELNEJ (ci-après ELNEJ-Ontario) afin d'examiner les changements survenus entre 1983 et 1993. Les méthodes d'enquête et l'instrumentation de l'ESEO ont été décrits en détail ailleurs (Boyle et coll. 1987). La population visée se composait des enfants nés entre le 1<sup>er</sup> janvier 1966 et le 1<sup>er</sup> janvier 1979 ayant pour lieu de résidence habituel le domicile d'un ménage ontarien. En tout, Statistique Canada a sondé 1 869 familles et 3 294 enfants en 1983. Les interviewers ont recueilli l'information d'un parent (habituellement la mère), d'un enseignant, pour les enfants de 4 à 11 ans, et du jeune en personne, pour ceux

âgés de 12 à 16 ans. Une enquête de suivi a eu lieu en 1987. Nous n'avons utilisé que les rapports des parents de 1983 concernant les enfants de 4 à 11 ans<sup>15</sup>.

Outre la portée provinciale de la première, l'ESEO et l'ELNEJ diffèrent sur plusieurs plans. En premier lieu, 9 % des enfants de l'ESEO vivaient uniquement avec leur mère, contre 15 % pour l'échantillon ontarien de l'ELNEJ. Pareille hausse est cohérente avec la croissance de la proportion de familles qui comptaient de jeunes enfants et avaient à leur tête une femme seule, observée entre 1983 et 1994. Nous ne pensons pas que cette hausse dérive principalement des variations dans les méthodes employées pour identifier les familles monoparentales et biparentales dans les deux échantillons (Dooley 1995). Deuxièmement, en dépit de son



inférieurs à ceux de la monoparentalité pour les troubles psychiatriques, mais pas pour de piètres résultats scolaires ou de fréquentes difficultés sociales. La valeur p des termes d'interaction n'est jamais inférieure à 0,05, mais les estimations ponctuelles sont constamment négatives et leur forte valeur absolue indique que cette « mesure du revenu » particulièrement pourrait auto-riser une meilleure discrimination avec les couples qu'avec les mères seules.

Quelles grandes conclusions peut-on tirer de ces résultats? La première est que nos estimations des effets de la faiblesse du revenu manquent de robustesse. Les approches les plus classiques (tableaux 7.3 et 7.4) révèlent qu'un faible revenu présente de l'importance dans la reprise d'une année et les problèmes sociaux fréquents, mais pas pour les troubles psychiatriques ou de piètres résultats scolaires. L'emploi de données non pondérées ou d'une variable nominale pour les familles gagnant moins de 20 000 \$ montre cependant une forte association entre le faible revenu et tous les problèmes mentionnés, sauf l'hyperactivité. L'un des grands objectifs de l'ELNEJ est d'évaluer la corrélation statistique entre la santé de l'enfant et le revenu familial. Le manque de robustesse des estimations relatives à pareille association révèle que l'analyse doit reposer sur des données plus détaillées à l'égard du revenu. Les mesures aggrégées à notre disposition ne permettent tout simplement pas de répondre clairement à cette question capitale en matière de politique publique.

Une autre conclusion est que la monoparentalité constitue la variable la plus uniformément et la plus significativement associée aux issues psychiatriques, scolaires et sociales examinées. Les coefficients estimatifs de cette variable se démarquent par leur robustesse, mais leur interprétation soulève maintes questions. Dans quelle mesure cette constatation reflète-t-elle les plus longues périodes de faible revenu qu'une mère pourrait traverser, comparativement aux familles biparentales? La monoparentalité exerce-t-elle un « effet » différent de celui attribué aux seules ressources économiques et, dans l'affirmative, quel est-il? S'agit-il des ressources limitées dans le temps (« pauvreté temporelle ») avec lesquelles la mère seule typique doit composer, ou pourrait-il s'agir des problèmes de santé de la mère elle-même? Le coefficient de la monoparentalité serait-il aussi élevé si la comparaison portait sur un autre groupe, peut-être plus approprié (les familles

biparentales à risque élevé d'éclatement au lieu d'un échantillon aléatoire de familles biparentales)? Lors de l'Enquête sur la violence envers les femmes de 1994, 16 % des femmes mariées interrogées avaient déclaré avoir subi des sévices de leur partenaire. Toutefois, 60 % des femmes mariées antérieurement rapportaient avoir été victimes de la violence de leur ex-partenaire (Kingsston-Riechers 1997). On en déduit que dans certains cas au moins, les problèmes connus par les enfants de mères seules pourraient principalement résulter de la nature violente de l'union d'où ils sont issus. Pour ces enfants, la dissolution du mariage pourrait se traduire par une amélioration notable des conditions de vie, aspect qu'on néglige en les comparant à un échantillon aléatoire d'enfants venant de familles biparentales. Notre aptitude à suivre les mêmes enfants dans et hors des familles dont la structure et les contraintes varient, au cours des cycles subséquents de l'ELNEJ, constituera une nette amélioration à cet égard.

En ce qui concerne les autres variables indépendantes, on estime couramment (mais pas toujours) que les enfants dont la mère a plus de 34 ans courent moins de risques d'éprouver des difficultés. Ce résultat s'ouvre néanmoins à diverses interprétations, à l'instar de celui sur le coefficient de la monoparentalité. L'une d'elles est que l'âge de la mère pourrait servir d'approximation au revenu à long terme des parents si le fait de remettre la fécondation à plus tard indique une association positive avec une meilleure rémunération, ainsi qu'on pourrait le penser. Les mères plus âgées pourraient aussi s'avérer plus matures, avoir plus de temps à leur disposition ou attendre davantage avant d'avoir un nouvel enfant. Ces éventualités méritent d'être approfondies.

L'incidence des problèmes est typiquement plus faible chez les filles. Des travaux antérieurs, en particulier ceux sur l'hyperactivité et les troubles des conduites (Offord et coll. 1987), paraissent étayer cette constatation dans une certaine mesure. Parmi les variables nominales traduisant la scolarité de la PMI, seul le coefficient de la variable « pas de diplôme d'études secondaires » présentait constamment le signe prévu, mais cette estimation elle-même n'était significative que pour 2 problèmes sur 6. Le résultat nous a quelque peu surpris, car nous attendions à ce que cette variable reflète diverses influences sur la santé et le développement de l'enfant, y compris l'effet du revenu permanent.

Tableau 7.4  
Estimations des logits des difficultés scolaires et sociales et d'un ou plusieurs problèmes psychiatriques, scolaires ou sociaux quelconques

	Reprise de l'année	Pièces résultats scolaires	Fréquents problèmes sociaux	Un ou plusieurs problèmes quelconques
Mère seule	1,04	0,58	0,67	0,74
Faible revenu	(3,5)	(1,9)	(2,0)	(4,0)
	0,44	0,19	0,86	0,13
	(2,3)	(0,70)	(3,2)	(1,0)
Mère seule x Faible revenu	-0,35	0,24	-0,03	0,13
	(0,93)	(0,54)	(0,06)	(0,52)
Mère sans diplôme d'études secondaires	0,59	0,36	0,24	0,35
	(3,1)	(1,4)	(0,82)	(2,6)
Mère avec études postsecondaires partielles	-0,13	-0,04	-0,16	0,01
	(0,65)	(0,13)	(0,60)	(0,12)
Mère avec diplôme ou grade universitaire ou collégial	-0,07	-0,39	-0,06	-0,02
	(0,34)	(1,5)	(0,22)	(0,15)
Mère de plus de 34 ans	-0,29	-0,10	-0,22	-0,31
	(2,1)	(0,49)	(1,1)	(3,6)
Enfant de sexe féminin	-0,48	-0,76	-0,39	-0,35
	(3,5)	(3,8)	(2,0)	(4,4)
Enfant de 8 à 11 ans	1,12	0,53	0,58	0,44
	(6,0)	(2,7)	(2,5)	(5,0)
Nombre d'enfants	0,07	0,18	-0,15	0,02
	(0,92)	(1,7)	(1,7)	(0,43)
Constante	-3,9	-4,1	-3,6	-1,4
	(13,2)	(9,7)	(9,2)	(9,0)
Probabilité du dénouement (base) <sup>a</sup>	0,02	0,03	0,02	0,20
Effet du coefficient de monoparentalité <sup>b</sup>	+0,04	+0,02	+0,02	+0,14
Effet du faible revenu-couples <sup>b</sup>	+0,01	+0,005	+0,02	+0,02

Nota : (ratio 1). Données pondérées avec les seuils de l'ESSECO. Nombre d'observations : 9 283 enfants de 6 à 11 ans.  
<sup>a</sup> Probabilité théorique correspondant à la constante (garçon de 4 à 7 ans d'une famille biparentale non défavorisée dont la mère a moins de 35 ans et détient un diplôme d'études secondaires) et total de deux enfants.  
<sup>b</sup> Modification de la probabilité théorique du cas de base quand la variable nominal passe de zéro à un.

39 999 \$ et 40 000 \$ et plus. Très peu de coefficients des variables nominales se sont néanmoins avérés significatifs pour ces catégories. Les estimations à la droite du tableau 7.5 reposent sur les données pondérées et le nombre de personnes dans le ménage a été remplacé par le nombre d'enfants. Aucune de ces modifications n'a eu un effet appréciable sur les estimations. Les coefficients de la monoparentalité demeurent très significatifs et sont légèrement plus élevés qu'aux tableaux 7.3 et 7.4. La majorité des coefficients du faible revenu sont significatifs. La valeur p des troubles des conduites s'établit à 0,08 et seule l'hyperactivité ne présente pas de forte corrélation avec la faiblesse du revenu. Les coefficients du revenu sont

Tableau 7.3  
Estimations des logits des troubles psychiatriques

Un ou plusieurs troubles psychiatriques	Troubles affectifs	Troubles des conduites	Hyperactivité				
				Mère seule	Faible revenu	Mère seule x Faible revenu	Mère sans diplôme d'études secondaires
	0,63	(2,8)	(3,6)	0,87	(3,6)	(0,06)	0,30
	0,55	(2,6)	(3,6)	0,64	(2,6)	(0,51)	0,49
	0,12	(0,53)	(0,62)	0,35	(0,51)	0,14	0,14
	0,12	(0,53)	(0,62)	0,35	(0,51)	0,14	0,14
	0,24	(0,83)	(1,5)	0,01	(1,5)	0,02	0,02
	0,02	(0,09)	(0,06)	0,15	(1,0)	0,12	0,12
	0,007	(0,30)	(2,1)	0,12	(0,81)	0,5	0,5
	-0,34	(2,4)	(1,2)	-0,17	(4,3)	-0,25	-0,48
	-0,32	(0,28)	(5,9)	-0,80	(5,3)	0,03	-0,57
	0,47	(8,4)	(1,6)	0,21	(1,4)	0,81	0,14
	0,02	(0,59)	(1,8)	-0,12	(3,7)	-0,03	0,21
	-1,8	(13,8)	(10,6)	-2,5	(14,0)	-2,7	-3,0
	0,15	(11,9)	(10,6)	0,058	(14,0)	0,06	0,08
	+0,10	(11,9)	(10,6)	+0,07	(14,0)	+0,04	+0,06
	+0,01	(11,9)	(10,6)	-0,006	(14,0)	+0,01	-0,006

**Nota :** (ratio 1). Données pondérées avec les seuils de l'ESQ. Nombre d'observations : 12 735 enfants de 4 à 11 ans.  
a Probabilité théorique égale à la constante (garçon de 4 à 7 ans de famille biparentale non défavorisée dont la mère a moins de 35 ans et détient un diplôme d'études secondaires) et total de deux enfants.  
b Modification de la probabilité théorique du cas de base quand la variable nominale passe de zéro à un.

À la droite du tableau 7.5, on peut voir les coefficients résultant de la variation [4]. Dans ce cas, nous avons pris pour mesure de la faiblesse du revenu une variable nominale égale à un quand le revenu total du ménage était inférieur à 20 000 \$<sup>14</sup>. Au départ, nous avons testé des variables nominales pour plus de tranches de revenu indiquées dans le fichier à grande diffusion à l'égard des mères seules et des couples, soit de 20 000 \$ à 29 999 \$, de 30 000 \$ à

statistiquement significatifs. (La reprise d'une année et les difficultés sociales se caractérisaient déjà par un coefficient significatif au tableau 7.4.) Chacun de ces quatre coefficients ne représente cependant qu'environ le tiers à la moitié du coefficient correspondant de la monoparentalité. Aucun coefficient d'interaction n'est significatif. Les autres coefficients estimatifs (non présentés) se rapprochent passablement de ceux des tableaux 7.3 et 7.4.



enfants plus âgés sont plus susceptibles de se retrouver aux prises avec chacune des difficultés énumérées au tableau 7.4. Enfin, le nombre d'enfants dans la famille présente une faible association positive avec de « piètres résultats scolaires » et une faible corrélation négative avec les problèmes sociaux<sup>12</sup>.

La dernière colonne du tableau 7.4 donne les estimations à logit de la mesure sommaire la plus générale. Comme nous l'avons déjà mentionné, cette variable prend la valeur un si l'enfant connaît une ou plusieurs difficultés psychiatriques, scolaires ou sociales. Selon les estimations, il est plus probable qu'un enfant éprouve une ou plusieurs difficultés s'il s'agit d'un garçon ou s'il a de 8 à 11 ans, s'il vit seul avec sa mère, si sa mère ne possède pas de diplôme d'études secondaires ou si elle a moins de 35 ans. Une fois de plus, le coefficient de monoparentalité a une incidence quantitative appréciable puisqu'il augmente la probabilité théorique d'un trouble quelconque de 14 points pour la faire passer de 20 % à 34 %<sup>13</sup>.

La constatation la plus étonnante jusqu'à présent concerne la faible association entre la faiblesse du revenu (situation courante) et l'un des trois troubles psychiatriques ou une piètre réussite scolaire. Pour en vérifier la robustesse, nous avons pris les mesures suivantes. Nous avons estimé chaque modèle à logit des tableaux 7.3 et 7.4 en introduisant les variations que voici une à la fois: [1] « très faible revenu » (moins des trois quarts du SFR de 1992) au lieu de « faible revenu » (revenu inférieur au SFR de 1992); [2] seuil de 10 % au lieu du seuil de l'ESQ; [3] données non pondérées plutôt que pondérées et [4] variable nominale égale à un lorsque le revenu total du ménage était inférieur à 20 000 \$ plutôt que « faible revenu ».

Les variations [1] et [2] aboutissent à des coefficients estimatifs fort semblables à ceux des tableaux 7.3 et 7.4 pour le faible revenu et le terme d'interaction (et d'autres variables). On ne peut toutefois en dire autant pour les variations [3] et [4]. À la gauche du tableau 7.5, on peut voir les coefficients de la variation [3] pour la monoparentalité, le faible revenu et leur interaction. Le seul changement notable à l'égard de la monoparentalité se rapporte à la diminution du coefficient associé à la reprise d'une année, mais celui-ci demeure très significatif. Les coefficients du faible revenu liés aux troubles des conduites, aux problèmes affectifs, à un ou plusieurs troubles psychiatriques et à un problème supplémentaire quelconque sont maintenant tous

Les coefficients des troubles des conduites et des troubles affectifs ressemblent à ceux de l'hyperactivité à plusieurs égards. Ainsi, le coefficient de la monoparentalité est à la fois important et statistiquement significatif. En changeant cette variable accroît la probabilité théorique d'un trouble des conduites, qui passe de 8 % à 14 %, et celle d'un trouble affectif, qui monte de 6 % à 10 %. Ni le coefficient de faible revenu, ni le terme d'interaction ne sont significatifs pour ces deux troubles. On associe l'inexistence d'un diplôme d'études secondaires chez la PMI à une probabilité sensiblement plus élevée d'un trouble des conduites. Les enfants de mères plus âgées sont moins susceptibles d'éprouver des troubles des conduites ou des troubles affectifs. Les filles sont aussi moins enclines à souffrir de troubles des conduites, tandis que la probabilité que les enfants plus âgés soient aux prises avec un trouble affectif est plus grande. Le nombre d'enfants dans la famille est positivement corrélié à l'existence d'un trouble des conduites.

À la dernière colonne du tableau 7.3, on peut voir que la probabilité d'un ou de plusieurs des trois troubles psychiatriques est plus grande pour les garçons et les enfants de 8 à 11 ans, et pour les enfants ne vivant qu'avec leur mère, avec une mère ne détendant pas de diplôme d'études secondaires ou ayant moins de 35 ans. Le coefficient de monoparentalité accroît la probabilité théorique d'un trouble quelconque de 10 points pour la faire passer de 15 % à 25 %.

Le tableau 7.4 donne les estimations des modèles à logit pour les difficultés scolaires, les problèmes sociaux et une ou plusieurs des difficultés apparaissant dans ce tableau ou au tableau 7.3. Le coefficient de monoparentalité est statistiquement significatif dans chaque cas et relève la probabilité théorique de 2 à 4 points de pourcentage, ce qui s'avère appréciable comparativement à la probabilité de base. Contrairement à ce qui se produit avec les troubles psychiatriques, les coefficients du faible revenu associés à la reprise d'une année et à des problèmes sociaux fréquents sont statistiquement significatifs et modifient la probabilité théorique de 1 et de 2 points de pourcentage, respectivement. Les coefficients d'interaction, en revanche, sont minimes et non significatifs.

En général, la scolarité de la mère illustre le signe prévu, mais seul le coefficient exprimant l'absence de diplôme d'études secondaires « sur la » reprise d'une année « est significatif. L'âge de la mère n'est significatif que pour la reprise d'une année. Les garçons et les

avec les régressions logistiques. Les poids affectent aussi bien l'erreur-type que certaines estimations ponctuelles, remarque particulière- ment valable pour le coefficient de faible revenu dans les régressions se rapportant aux troubles psychiatriques.

On verra au tableau 7.3 les estimations des modèles à logit pour les trois troubles psychiatriques<sup>9</sup>. Les variables indépendantes sont toutes des variables nominales sauf le nombre d'enfants. (La constante correspond à un enfant de sexe masculin de 4 à 7 ans, issu d'une famille biparentale non défavorisée dans laquelle la mère a moins de 35 ans et possède un diplôme d'études secondaires.) Examinons d'abord les estimations concernant l'hyperactivité. On as- socie la monoparentalité mais pas la faiblesse du revenu à une probabilité sensiblement plus élevée que ce trouble se manifeste<sup>10</sup>. Nous avons inclus un terme d'interaction pour ces deux variables dans l'équation pour la faiblesse du revenu n'agisse pas de la même manière sur les mères seules que sur les couples, les périodes de faible revenu ayant tendance à être plus lon- gues pour les premières. Le coefficient d'inte- raction est négatif mais pas significativement différent de zéro. Le coefficient des catégories la plus basse et la plus élevée pour ce qui est de la scolarité de la mère a bien le signe prévu, mais sa valeur p n'est inférieure à 0,05 que dans le second cas. La probabilité de l'hyperactivité est sensiblement plus faible pour les filles, tandis qu'il existe une légère possibilité (valeur p inférieure à 0,10) qu'elle soit plus fréquente chez les en- fants plus âgés et ceux venant d'une famille moins nombreuse.

Nous aimerions illustrer l'effet quantitatif des coefficients, surtout ceux de la situation familiale et du faible revenu. Puisqu'il ne s'agit pas d'un effet linéaire, nous avons commencé par calculer la probabilité théorique d'un « cas de base », dans la rangée suivant la constante. Le « cas de base » reprend les mêmes caractéristiques que la constante si ce n'est que la famille compte seulement deux enfants. La rangée après le « cas de base » montre ce qui se produit quand la variable indiquant la monoparentalité prend la valeur un plutôt que zéro. La probabilité théori- que de l'hyperactivité augmente de 7 points, donc passe de 6 % à 13 %. La rangée suivante si- gnale l'effet du coefficient du revenu, presque égal à zéro dans le cas présent. Le terme d'inte- raction n'est presque jamais significatif, en sorte qu'on n'observe pas d'effet séparé du revenu pour les mères seules<sup>11</sup>.

l'enfant (parfois négativement, parfois positive- ment), cela peut-être même en présence de con- trôles à l'égard du revenu familial. Une incidence négative pour traduire l'absence de solutions de rechange de qualité abordables aux soins dis- pensés par les parents. D'autre part, il y a au moins deux explications à une incidence posi- tive. Un meilleur travail rémunéré pourrait re- vailorer le parent et l'inciter à accorder plus d'attention et une attention de meilleure qualité à l'enfant. Pour une mère vivant avec son con- joint, un travail mieux rémunéré pourrait aussi signifier un meilleur contrôle sur les dépenses du foyer. Selon l'hypothèse de l'« instinct mater- nel », la mère moyenne s'inquiètera plus du bien- être de ses enfants que le père moyen. Advenant le cas où cette hypothèse se confirme, un meilleur contrôle de la situation économique par la mère devrait faire en sorte qu'une plus grande traction du revenu va au bien-être de l'enfant, y compris aux soins de santé (Schultz 1990, Thomas 1990, Phipps et Burton 1992, et Brow- ning et coll. 1994).

Nous avons estimé les modèles en recou- rant à une variable nominale pour indiquer si la PMI avait travaillé « toute l'année à temps plein » et à une deuxième pour indiquer s'il s'agissait d'un travail « une partie de l'année ou à temps partiel ». Nous ne sommes jamais parvenus à réfuter l'hypothèse que l'un ou l'autre coefficient avait la valeur nulle<sup>12</sup>. Par conséquent, ces esti- mations n'apparaissent pas dans les tableaux présentés plus loin. Nous n'avons néanmoins fait qu'effleurer la question avec l'ELNEJ et des ana- lyses plus poussées s'imposent.

Enfin, il a fallu décider si on devait ou non utiliser les poids de l'échantillon dans l'analyse multivariée. On s'attendait relativement peu à cet aspect dans les ouvrages d'économique parce qu'on constate couramment—du moins on le suppose—que la pondération n'apporte pas grand-chose. Nous avons adapté un test proposé par DuMouchel et Duncan (1983) dans le con- texte d'une régression linéaire. Chaque modèle à logit a fait l'objet d'une estimation faisant in- tervenir la relation entre chaque variable indé- pendante et le poids de l'échantillon. Nous avons ensuite testé l'hypothèse que les termes d'inte- raction étaient conjointement égaux à zéro et sommes parvenus à la réfuter avec une valeur p d'au moins 0,05 pour les troubles des conduites, les troubles affectifs et les problèmes sociaux. Nous n'avons cependant pu le faire pour l'hyperactivité, la reprise d'une année et les diffi- cultés scolaires. C'est pourquoi nous avons uti- lisé les données pondérées et non pondérées



Tableau 7.2  
Caractéristiques des familles de l'ELNEJ

Pourcentage avec	Mères seules	Couples	Total
Mère seule	50	7	14
Très faible revenu <sup>a</sup>	66	15	22
Faible revenu <sup>b</sup>	22	15	16
Mère sans diplôme d'études secondaires	22	15	19
Mère avec diplôme d'études secondaires	16	19	29
Mère avec études postsecondaires incomplètes	35	28	36
Mère avec diplôme ou grade universitaire ou collégial	27	38	58
Mère de plus de 34 ans	47	60	51
Enfants de 8 à 11 ans	49	51	2,3
Nombre moyen d'enfants par famille	2,0	2,4	6 439
Nombre non pondéré de familles avec enfants de 4 à 11 ans	872	5 567	6 296
Nombre non pondéré de familles avec enfants de 6 à 11 ans	807	5 489	

<sup>a</sup> Revenu familial inférieur à 75 % du seuil de faible revenu de 1992.

<sup>b</sup> Revenu familial inférieur au seuil de faible revenu de 1992.

Source : Calculs des auteurs d'après les données de l'Enquête longitudinale nationale sur les enfants et les jeunes de Statistique Canada.

séparément ou collectivement égaux à zéro. La valeur p la plus faible obtenue lors des tests était 0,19. Les données confirment donc l'hypothèse que le sexe de l'enfant constitue un facteur de substitution.

En troisième lieu, les 11 833 enfants de l'échantillon ne venaient que de 5 052 familles. Afin d'en tenir compte et d'obtenir une estimation de l'erreur-type généralement plus robuste que les estimations classiques, nous avons fait appel à une méthode mise au point par White (1980). Cette correction n'a habituellement pas engendré d'écart important.

Quatrièmement, nous nous sommes intéressés aux tendances en matière de travail rémunéré chez les parents. En effet, le travail rémunéré des parents peut influencer de diverses manières sur la santé et le développement de

guise de contrôle, nous avons procédé à une deuxième estimation des modèles à logit, en incluant les 164 observations et une variable nominale égale à un, lorsqu'une valeur manquait pour une variable indépendante quelconque<sup>7</sup>. Le coefficient de la variable nominale représentant la valeur manquante n'était jamais significatif, même au seuil de 20 %.

Deuxièmement, le sexe de l'enfant est représenté par une simple variable nominale. En d'autres termes, il y a simplement substitution de la coordonnée à l'origine dans le modèle. Il se pourrait toutefois que l'incidence d'autres variables indépendantes dépend du sexe de l'enfant. Nous avons donc estimé chaque modèle à logit avec un terme représentant l'interaction entre le sexe de l'enfant et chaque variable indépendante. Nous ne sommes jamais parvenus à réfuter l'hypothèse que les coefficients étaient



conditionnels à la situation économique présents le même ordre de grandeur que ceux conditionnels à la situation familiale. L'écart entre les enfants défavorisés et ceux qui ne le sont pas est de quatre points de pourcentage, tant pour les mères seules (13 % - 9 %) que pour les couples (8 % - 4 %). La variation entre les enfants des familles monoparentales et biparentales s'élève à cinq points pour les défavorisés (13 % - 8 %) et les autres (9 % - 4 %). À peine 3 % des PMI rapportent que leur enfant éprouve des « difficultés » ou de « grandes difficultés » en classe<sup>2</sup>. Le plus fort pourcentage d'enfants aux prises avec ce problème se remarque chez les familles monoparentales à faible revenu, mais malgré cela, il ne dépasse pas 7 %<sup>3</sup>.

Les PMI signalent aussi que 3 % seulement des enfants connaissent « souvent » ou « toujours » de la difficulté à s'entendre avec leurs parents, leurs pairs ou leurs enseignants<sup>4</sup>. Comme c'est le cas avec la piètre réussite scolaire, les enfants des mères seules et défavorisées se démarquent des autres groupes avec une prévalence de 9 %. Si on recourt à la mesure du « très faible revenu » (moins des trois quarts du SFR de 1992) cependant, on note aussi un écart de 4 et de 5 points de pourcentage entre les enfants des couples défavorisés et non défavorisés, pour les piètres résultats scolaires et les difficultés de socialisation, respectivement.

La dernière rangée du tableau 7.1 indique le pourcentage d'enfants de 6 à 11 ans aux prises avec un ou plusieurs des problèmes précités. Les écarts varient considérablement avec la situation familiale : 19 points (43 % - 24 %) pour les enfants défavorisés contre 12 points (32 % - 20 %) pour ceux au-dessus du seuil de faible revenu. L'écart selon la situation économique reste appréciable chez les enfants de famille monoparentale, avec 11 points (43 % - 32 %), mais il s'avère faible pour ceux qui possèdent leurs deux parents, soit 4 points (24 % - 20 %). La conclusion générale qu'on en tire est que la situation familiale présente de l'importance, peu importe la situation économique, et que cette dernière revêt une importance particulière dans les familles monoparentales.

Le tableau 7.2 expose les paramètres socio-économiques des enfants de l'échantillon et de leur famille. Quatorze pourcent des enfants sont issus d'une famille monoparentale. Les deux tiers d'entre eux vivent au sein d'une famille défavorisée et la moitié, dans une famille à très faible revenu, loin des taux de faible revenu parents. pour les enfants habitant avec leurs deux parents.

Les PMI qui sont aussi mères seules courent plus de risques de ne pas avoir terminé leurs études secondaires et sont moins susceptibles de détenir le diplôme ou le grade d'une université ou d'un collège. Elles sont aussi plus jeunes et comptent moins d'enfants que les PMI mariées. La répartition des enfants selon l'âge varie peu avec la situation familiale.

L'examen du tableau 7.2 révèle que les familles monoparentales et les couples mariés diffèrent à plusieurs égards. Les recherches mentionnées à la section précédente indiquent en outre que les difficultés psychiatriques, scolaires et sociales des enfants sont habituellement liées à plus d'une des variables du tableau 7.2. C'est pourquoi nous recourons à l'analyse multidimensionnelle pour évaluer la corrélation partielle entre la situation de l'enfant et les paramètres socio-économiques. Nous avons retenu pour cela le modèle à logit, en vertu duquel la probabilité d'un dénouement s'exprime par l'équation

$$\text{Prob}(Y=1 | X) = e^{X\beta} / (1 + e^{X\beta}) = 1 / (1 + e^{-X\beta})$$

où Y désigne une variable dépendante dichotomique, X est la valeur vectorielle d'une série de variables indépendantes, β représente le coefficient estimatif du logit et e = 2,718<sup>5</sup>. Nous avons choisi les variables indépendantes en fonction des données de l'ELNEJ disponibles ainsi qu'en fonction de ce qui s'est écrit sur les déterminants de la santé (Evans et Stoddart 1990, Grossman 1972, Grossman et Joyce 1989).

Plusieurs questions de méthodologie méritent notre attention. La première a trait aux valeurs absentes. Ainsi que nous l'expliquons en annexe, 1 103 observations ont été écartées parce que la valeur d'une variable dépendante manquait. Il n'existe pas, à notre avis, de solution facile au problème. Néanmoins, nous avons examiné les données pour déterminer si la moyenne inconditionnelle des variables indépendantes fluctuait à l'égard des observations avec et sans valeur manquante pour les variables dépendantes. Au seuil de signification de 5 %, les enfants pour lesquels une variable associée à un dénouement ne présentait pas toutes les valeurs avaient tendance à être de sexe féminin, à avoir de 8 à 11 ans, à venir d'une famille monoparentale à faible revenu et à compter plus de frères et de sœurs que la moyenne<sup>6</sup>. Les seules variables indépendantes pour lesquelles des valeurs faisaient défaut sont l'âge et la scolarité des parents. Les observations de ce genre étaient au nombre de 164 et n'ont pas été incluses à l'échantillon qui a servi à l'estimation. En

Tableau 7.1  
Pourcentage d'enfants souffrant de troubles psychiatriques,  
de difficultés scolaires et de problèmes sociaux

	Mères seules	Mères seules défavorisées au-dessus du seuil de faible revenu	Mères seules défavorisées (sous le seuil de faible revenu)	Couples défavorisés au-dessus du seuil de faible revenu	Total
	[1]	[2]	[3]	[4]	[5]

	9	9	4	4	5
Hyperactivité	15	9	7	6	7
Troubles des conduites	18	14	10	8	10
Troubles affectifs	29	22	16	14	16
Un ou plusieurs troubles psychiatriques	13	9	8	4	5
Reprise d'une année	7	3	4	2	3
Piètre réussite scolaire	9	4	5	2	3
Fréquents problèmes sociaux	43	32	24	20	23
Un ou plusieurs problèmes quelconques					

**Nota :** Les colonnes [2] et [4] se rapportent aux familles au-dessus du seuil de faible revenu.  
Nombre d'observations : 12 735 enfants (de 4 à 11 ans) pour les troubles psychiatriques et 9 283 enfants (de 6 à 11 ans) pour les difficultés scolaires et sociales. Seuils de l'ESSEO.  
**Source :** Calculs des auteurs d'après les données de l'Enquête longitudinale nationale sur les enfants et les jeunes de Statistique Canada.

habitant avec leurs deux parents, sous réserve de la tranche de revenu (comparaison de la colonne [1] avec la [3], et de la colonne [2] avec la [4]). Le plus petit écart conditionnel de cette nature est de trois points (9 % - 6 %) et concerne les troubles des conduites chez les enfants de familles monoparentales et biparentales, au-dessus du seuil de faible revenu dans les deux cas. L'écart le plus important (huit points) s'observe entre les enfants de familles monoparentales à faible revenu et ceux de couples défavorisés, pour les troubles des conduites et les troubles affectifs (15 % - 7 % et 18 % - 10 %). Soulignons par ailleurs que le pourcentage d'enfants de familles monoparentales qui éprouvent ces deux sortes de troubles dépasse l'incidence notée chez les enfants de couples à faible revenu.

Les écarts selon le faible revenu, la situation familiale restant la même, sont plus faibles (colonne [1] contre colonne [2] et colonne [3] contre colonne [4]). L'hyperactivité, par exemple, a la même prévalence chez les enfants de

mères seules défavorisées que chez ceux de mères seules mieux loties (9 %), il en va autant pour les enfants des couples défavorisés et leurs contreparties (4 %). Les variations entre les enfants de couples défavorisés ou non se révèlent négligeables pour ce qui est des troubles des conduites et des troubles affectifs, mais elles s'établissent respectivement à six et à quatre points de pourcentage chez les enfants de mères seules. En résumé, la situation familiale paraît jouer un rôle plus important que la faiblesse du revenu en ce qui concerne la prévalence des trois troubles psychiatriques. On parvient à la même conclusion qualitative en utilisant des seuils différents pour la faiblesse du revenu ou chaque sorte de trouble (résultats non indiqués ici).

Dans l'ensemble, 5 % seulement des enfants ont doublé une année, ce qu'on peut attribuer au fait que les plus vieux n'ont que onze ans. Contrairement à la situation observée pour les troubles psychiatriques, les écarts



6 à 11 ans, ces risques étaient quatre fois plus élevés lorsqu'il venait d'une famille dépendant de l'assistance sociale plutôt que d'une autre (Offord, Boyle et Jones, 1987).

Des associations aussi importantes entre la pauvreté et la morbidité ont été mises en relief dans des études sur le fonctionnement social et scolaire (Lipman et coll. 1994). En outre, ce lien marqué entre la pauvreté et diverses morbidités ne se cantonne pas à l'enfance. Ainsi, les tiers au moins des enfants qui manifestent des troubles des conduites continueront d'éprouver de sérieuses difficultés psychosociales une fois adultes (Offord et Bennett, 1994).

Quatre articles ont examiné le lien entre la

structure familiale<sup>1</sup> et la morbidité psychosociale de l'enfant à partir des résultats de l'ESEO. Munroe Blum, Boyle et Offord (1988) ont découvert que les enfants de familles monoparentales couraient sensiblement plus de risques de connaître divers problèmes psychiatriques et scolaires en se servant des données transversales de 1983. Si on contrôle le paramètre « assistance sociale » lors de l'analyse cependant, la monoparentalité ne garde pas cette relation sensible avec la morbidité. Dooly et Lipman (1996) ont ainsi que Curtis et ses collaborateurs (1996) ont eux aussi fait appel aux données transversales de 1983 pour vérifier l'existence de relations statistiques entre la situation familiale, le revenu et diverses mesures de la santé psychosociale et physique de l'enfant. Dans les deux cas, les chercheurs ont relevé d'importantes associations entre la monoparentalité et les problèmes familiales. L'incidence estimative du faible revenu s'avérerait toutefois beaucoup plus robuste.

Deux études seulement ont recouru aux données longitudinales de l'ESEO pour examiner les questions dont traite le présent chapitre, en partie à cause du petit nombre de mères seules sur lesquelles on possède des données en 1983 et 1987. Lipman et Offord (1997) ont découvert que les indicateurs de la situation familiale et de la pauvreté présentent des relations indépendantes significatives avec un développement laissant à désirer chez l'enfant. Dans leurs travaux sur les données transversales de 1983, Curtis et ses collaborateurs (1996) ont pour leur part constaté que les résultats de l'enquête confirment plus le rôle de la faiblesse du revenu que celui de la situation familiale en soi.

Les données d'autres sources indiquent que la pauvreté et la monoparentalité partagent des liens avec un taux de morbidité psychosociale plus élevé chez l'enfant (Duncan et Brooks-Gunn,

1997). Lipman, Offord et Dooly (1996) se sont penchés sur les données préliminaires de l'ELNEJ et ont noté que près du tiers (30,4 %) des enfants de 4 à 11 ans issus d'une famille monoparentale souffraient d'un trouble psychiatrique, taux sensiblement plus élevé que celui relevé pour les enfants de famille biparentale (18,8 %). Ils précisent toutefois que ces problèmes n'affligent pas la majorité des enfants de familles monoparentales et que la plupart des enfants qui en sont atteints viennent de familles biparentales. Ces chercheurs ont en outre remarqué que la monoparentalité et la faiblesse du revenu exercent chacun de leur côté une influence sensible sur le bien-être de l'enfant. Leur analyse multivariée se limitait néanmoins à ces deux variables indépendantes. Offord et Lipman (1996) se sont aussi intéressés à la fréquence des problèmes affectifs et comportementaux. D'après les premiers résultats de l'ELNEJ, ils concluent qu'en général, la gravité des problèmes diminue quand le revenu familial augmente.

## 2. Résultats pancanadiens

L'ELNEJ est conçue pour jager le développement et le bien-être de l'enfant dans le temps. Au cours du premier cycle, en 1994-1995, on a recueilli des renseignements sur 22 831 enfants de l'âge du nourrisson à celui de onze ans, dans le but lointain de les suivre jusqu'à l'âge adulte. L'échantillon excluait les enfants qui avaient séjourné plus de six mois dans une institution et les enfants autochtones vivant dans une réserve. (Les données recueillies au Yukon et dans les Territoires du Nord-Ouest ne se retrouvaient pas dans le premier lot de résultats.) Le principal répondant de l'ELNEJ est le membre du ménage qui connaît le mieux l'enfant, c'est-à-dire généralement le parent, quoiqu'on le désigne plus rarement par l'abréviation P.MI (personne la mieux informée). Notre analyse est basée sur 12 735 enfants âgés de 4 à 11 ans. Ces données sont décrites de façon plus détaillée en annexe.

Le tableau 7.1 indique le pourcentage d'enfants qui éprouvent des problèmes psychiatriques, scolaires ou sociaux selon la situation familiale et la faiblesse du revenu. Prenons les trois problèmes psychiatriques que voici : hyperactivité, troubles des conduites et troubles affectifs (leurs symptômes sont énumérés au tableau 7A.1 de l'annexe). La caractéristique la plus remarquable est que l'incidence de ces problèmes s'avère toujours plus élevée chez les enfants vivant uniquement avec leur mère que chez ceux



# Troubles psychiatriques, piètre réussite scolaire et problèmes sociaux chez l'enfant : rôles de la structure familiale et de la faiblesse du revenu

MARTIN D., DOOLEY, LORI CURTIS, ELLEN L. LIPMAN ET DAVID H. FEENY

Le chapitre que voici est essentiellement destiné à nous faire mieux saisir les rôles que la structure familiale et un faible revenu jouent dans l'apparition de troubles psychiatriques, une piètre réussite scolaire et la manifestation de problèmes sociaux chez les enfants du Canada. Si on s'entend largement sur l'impact des facteurs environnementaux dans pareilles difficultés, jusqu'à tout récemment, peu de données canadiennes, sinon aucune, ne permettaient d'évaluer l'importance des facteurs socio-économiques dans l'incidence et dans la gravité de tels problèmes.

L'Enquête longitudinale nationale sur les enfants et les jeunes (ELNEJ) laisse prévoir une nette amélioration en la matière et l'analyse qui suit constitue un premier pas essentiel vers l'utilisation des données de la première vague de l'enquête. Notre objectif est double. Nous commencerons par évaluer les liens entre diverses difficultés psychiatriques, scolaires et sociales, d'une part, et un assortiment de variables socio-économiques, d'autre part—la monoparentalité et un faible revenu parental surtout, mais aussi plusieurs autres paramètres démographiques. Ensuite, nous comparerons les constatations qui découlent de l'ELNEJ à celles de ce qui constituait jusqu'à présent la meilleure enquête sur la santé et le développement de l'enfant, à savoir l'Étude sur la santé des enfants de l'Ontario (ESEO), entreprise il y a une dizaine d'années.

En résumé, nos estimations multidimensionnelles révèlent qu'il existe un lien étroit entre le fait d'être élevé par une mère seule et toutes les difficultés de l'enfant à l'étude, ou presque. Si cette constatation s'avère très robuste, l'interpréter se révèle malaisé lorsqu'on ne dispose que d'une série de données transversales. Le lien estimatif entre divers problèmes infantiles et la situation économique de la famille, en revanche, manque de robustesse et dépend largement de la mesure du revenu ainsi que de la méthode

d'estimation employée. Il conviendrait d'approfondir la question au moyen de données fiscales plus précises, auxquelles le public n'a pas accès. La comparaison de l'ELNEJ et de l'ESEO révèle que les troubles psychiatriques sont devenus plus fréquents, en Ontario, entre 1983 et 1993, tandis que les enfants doublement née moins souvent. Les données suggèrent de surcroît que les changements survenus au cours de la décennie ont moins bénéficié aux enfants de mères seules qu'à ceux de familles biparentales.

## 1. Examen de la documentation

L'Enquête sur la santé des enfants de l'Ontario s'est déroulée en 1983 et a fait l'objet d'un suivi en 1987 (Boyle, Offord, et Hoffmann 1987, Offord, Boyle, Racine et coll. 1992). À ces occasions, on avait recueilli des données sur les troubles psychiatriques de l'enfant, sur son fonctionnement social et scolaire, sur sa santé physique et sur diverses variables socio-démographiques. Plusieurs études ont recouru aux données de l'ESEO en vue de préciser les liens entre les difficultés économiques de la famille et la morbidité chez l'enfant. Ainsi, Cadman et ses collaborateurs (1986) ont illustré l'existence de problèmes de santé chroniques très fréquents chez les enfants des familles défavorisées. Des études sur les problèmes affectifs et comportementaux ont également fait ressortir une association sensible et conséquente entre les difficultés économiques (faible revenu ou recours à l'assistance sociale) et les troubles psychiatriques (Lipman, Offord et Boyle 1994, Lipman et Offord 1997, Offord, Boyle et Jones 1987). Les risques qu'un enfant de 4 à 11 ans éprouve un ou plusieurs troubles psychiatriques (hyperactivité avec déficit de l'attention, trouble des conduites ou trouble affectif) étaient trois fois plus grands pour un enfant défavorisé que pour un autre (Lipman et coll. 1994). Pour un garçon de

- LUKE, D.A. (1993). « Charting the Process of Change: A Primer on Survival Analysis. » *American Journal of Community Psychology*. Vol. 21, 203-245.
- MARCIL-GRATTON, N. (1993). « Growing Up with a Single Parent, a Transitional Experience? Some Demographic Measurements. » Dans J. Hudson et B. Galaway (dir.). *Single Parent Families: Perspectives on Research and Policy*. Toronto: Thompson Educational Publishing.
- MCLANAHAN, S. (1985). « Family Structure and the Reproduction of Poverty. » *American Journal of Sociology*. Vol. 90, 873-901.
- MCLANAHAN, S. et L.L. BUMPASS (1988). « Intergenerational Consequences of Family Disruption. » *American Journal of Sociology*. Vol. 94, 130-152.
- MITCHELL, B.A., A.V. WISTER et T.K. BURCH (1989). « The Family Environment and Leaving the Parental Home. » *Journal of Marriage and the Family*. Vol. 51, 605-613.
- MUELLER, C.W. et H. POPE (1977). « Marital Instability: A Study of its Transmission Between Generations. » *Journal of Marriage and the Family*. Vol. 39, 83-93.
- STATISTIQUE CANADA (1991). *Naissances*. Ottawa : Statistique Canada, n° 84-210 au catalogue.
- THORNTON, A. (1991). « Influence of the Marital History of Parents on the Marital and Cohabitation Experiences of Children. » *American Journal of Sociology*. Vol. 96, 868-894.
- THORNTON, A. et D. CAMBURN (1987). « The Influence of the Family on Premarital Sexual Attitudes and Behaviors. » *Demography*. Vol. 24, 323-340.
- WALLERSTEIN, J.S. (1991). « The Long-Term Effects of Divorce on Children: A Review. » *Journal of the American Academy of Child and Adolescent Psychiatry*. Vol. 30, 349-360.
- WEBSTER, E.R., T.L. ORBUC et J.S. HOUSE (1995). « Effects of Childhood Family Background on Adult Marital Quality and Perceived Stability. » *American Journal of Sociology*. Vol. 101, 404-432.
- YOUNG, C. (1987). *Young People Leaving Home in Australia*. Canberra: Australian Family Formation Project Monograph No. 9.
- ZHAO, J.Z., F. RAJULTON et Z.R. ZENAIIDA (1994). « Family Structure and Parental Characteristics: Their Impact on Children's Home-Leaving in Canada. » Communication présentée au 194 Annual Meetings of the Population Association of America, Miami Florida.

*Family and Public Policy*. Washington: Urban Institute Press.

FURSTENBERG, F.F. Jr., S.D. HOFFMAN et L. SHRESTA (1995). « The Effect of Divorce on Intergenerational Transfers: New Evidence. » *Demography*. Vol. 32, 319-333.

FURSTENBERG, F.F. Jr. et J.O. TEITLER (1994). « Reconsidering the Effects of Marital Disruption. What Happens to Children of Divorce in Early Adulthood? » *Journal of Family Issues*. Vol. 15, 173-190.

GABARDI, L. et L.A. ROSEN (1992). « Intimate Relationships: College Students from Divorced and Intact Families. » *Journal of Divorce and Remarriage*. Vol. 18, 25-56.

GEE, E.M. (1992). « Adult Outcomes Associated with Childhood Family Structure: an Appraisal of Research and an Examination of Canadian Data. » Simon Fraser University, non publié.

GLENN, N.D. et K.B. KRAMER (1987). « The Marriages and Divorces of the Children of Divorce. » *Journal of Marriage and the Family*. Vol. 49, 811-825.

GOLDSCHIEDER, F.K. et C. GOLDSCHIEDER (1989). « Family Structure and Conflict: Nest-Leaving Expectations of Young Adults and Their Parents. » *Journal of Marriage and the Family*. Vol. 51, 87-97.

GUILBERT, E. et G. FORGET (1991). « Teenage Pregnancy in Canada and Quebec. » *Canadian Family Physician*. Vol. 37, 1184-1192.

KEITH, V. et B. FINDLAY (1988). « The Impact of Divorce on Children's Educational Attainment, Marital Timing, and Likelihood of Divorce. » *Journal of Marriage and the Family*. Vol. 50, 797-809.

KIERNAN, K.E. (1992). « The Impact of Family Disruption in Childhood on Transitions Made in Young Adult Life. » *Population Studies*. Vol. 46, 213-234.

LE BOURDAIS, C. et N. MARCIL-GRATTON (1996). « Family Transformations Across the Canadian/American Border: When the Laggard Becomes the Leader. » *Journal of Comparative Family Studies*. Vol. 27, 415-436.

LILLARD, L.A. et M.J. BRIEN (1994). « Simultaneity in the Timing of Marriage, Cohabitation and Non-Marital Fertility. » *Meetings of the Population Association of America*, Miami Florida.

uns des autres et la décision de poursuivre ses études, par exemple, peut englober celle de ne pas avoir d'enfant. Pour déterminer l'effet direct de la séparation des parents sur la propension des jeunes femmes à avoir un enfant, nous avons relaté l'analyse en omettant, ici encore, la variable « éducation ». L'exclusion de cette variable a eu pour effet d'augmenter légèrement le coefficient associé à la séparation des parents et ceux associés aux femmes catholiques et protestantes non pratiquantes. Ces résultats font ressortir la nécessité d'obtenir davantage d'information sur le milieu familial dans lequel les enfants ont grandi, ainsi que sur la période à laquelle le niveau d'études est atteint, afin de mieux comprendre l'effet de ces variables.

## Bibliographie

AMATO, P.R. (1996). « Explaining the Intergenerational Transmission of Divorce. » *Journal of Marriage and the Family*. Vol. 58, 628-640.

AMATO, P.R. (1993). « Children's Adjustment to Divorce: Theories, Hypotheses, and Empirical Support. » *Journal of Marriage and the Family*. Vol. 55, 23-38.

AXINN, W.G. et A. THORNTON (1996). « The Influence of Parents' Marital Dissolutions on Children's Attitudes Towards Family Formation. » *Demography*. Vol. 33, 66-81.

BLAU, P.M. et O.D. DUNCAN (1967). *The American Occupational Structure*. New York: John Wiley and Sons.

CHERLIN, A.J., K.E. KIERNAN et P.L. CHASE-LANDALE (1995). « Parental Divorce in Childhood and Demographic Outcomes in Young Adulthood. » *Demography*. Vol. 32, 299-318.

COX, D.R. (1972). « Regression Models and Life Tables (with Discussion). » *Journal of the Royal Statistical Society, Series B*, Vol. 34, 187-220.

DUCHESSNE, L. (1996). *La situation démographique au Québec - Édition 1996*. Québec : Bureau de la Statistique du Québec.

DUMAS, J. et Y. PÉRON (1992). *Mariage et vie conjugale au Canada*. Ottawa : Statistique Canada, n° 91-534 au catalogue.

FURSTENBERG, F.F. Jr. (1988). « Good Dads - Bad Dads: Two Faces of Fatherhood. » Dans A.J. Cherlin (dir.). *The Changing American*



même dans un cadre aussi restreint, les chercheurs en sont rapidement arrivés à la conclusion qu'il est impossible d'obtenir une parfaite compréhension du bien-être économique et de la redistribution économique entre générations sans inclure également des variables sociales dans l'analyse.

La répétition de la pauvreté à l'âge adulte est l'incidence la plus souvent associée à l'instabilité familiale durant l'enfance. Les enfants qui ont vécu dans une famille monoparentale dirigée par la mère ont souvent éprouvé des difficultés financières durant cet épisode de leur vie familiale. Or il a été démontré que la pauvreté durant l'enfance est associée à un faible statut socio-économique à l'âge adulte, ainsi qu'au fait d'avoir un enfant ou de former une union à un jeune âge.

Quels que soient les liens entre la répétition de la pauvreté et la transmission des comportements familiaux, il est probable que la manière dont les futures générations de Canadiens commenceront leur vie familiale sera fortement influencée par les divers modes de vie familiaux dont ils font actuellement l'expérience. Il faut donc poursuivre les études, afin de surveiller l'incidence que les changements dans le milieu familial des enfants exercent, d'abord sur leur développement cognitif et social et, ensuite, sur leurs attitudes et comportements en tant que couples et parents. Nous pourrions très bien constater que la manière dont la séparation des parents a été vécue par les enfants est un facteur beaucoup plus important dans la transmission intergénérationnelle du divorce que les caractéristiques économiques proprement dites.

## Notes

<sup>1</sup> Zhao et coll., (1994) ont utilisé une stratégie similaire pour l'ESG de 1990. Même s'ils posaient des données très détaillées sur la vie familiale des enfants pendant qu'ils grandissaient, ces chercheurs n'ont pu étudier l'incidence de l'éclatement familial qu'en regard du fait de quitter la maison.

<sup>2</sup> Dans 259 cas, le père a déclaré vivre avec un nouveau partenaire; dans 105 cas, la mère a déclaré la même chose; enfin, dans 152 cas, les deux parents ont déclaré avoir un nouveau partenaire dans leur vie.

<sup>3</sup> Comme les études ne sont généralement pas terminées à 15 ans, nous avons tenté de corriger les données de façon rétrospective en fonction du niveau de scolarité atteint, selon

l'âge. Dans le cas par exemple d'un répondant de 25 ans qui aurait déclaré avoir obtenu un diplôme d'études postsecondaires, nous avons présupposé que celui-ci avait terminé ses études secondaires à l'âge de 17 ans et ses études postsecondaires à 19 ans. Nous avons ainsi créé une covariable variant dans le temps; à titre d'exemple, la variable nominale « sans diplôme d'études secondaires » prend la valeur de 1 à l'âge de 15 et 16 ans et de 0, par la suite; la variable nominale « diplôme d'études secondaires » prend la valeur de 1 à 17 et 18 ans et la valeur de 0 avant et après cet âge, et ainsi de suite pour toutes les autres catégories de la variable représentant le niveau de scolarité. Cependant, cette variable n'est pas sans causer de problèmes : en effet, en raison des grandes variations dans les systèmes scolaires à travers le Canada, il a été difficile d'attribuer des âges à des niveaux de scolarité. Il nous a fallu également presumer que les répondants avaient terminé leurs études sans interruption. Comme l'utilisation de cette variable variant dans le temps n'a pas modifié sensiblement nos résultats, nous avons conservé le niveau de scolarité complet au moment de l'enquête, comme donnée pour l'analyse finale.

<sup>4</sup> Comme l'a fait remarquer un examinateur anonyme, certains pourraient prétendre que l'« éducation » ne peut être considérée comme une simple variable exogène, car les ouvrages économiques ont démontré que le niveau de scolarité, le mariage et la première conception sont des décisions étroitement liées (Lillard et Brien, 1994). Cependant, comme nous n'avons aucune donnée rétrospective sur le niveau de scolarité, il nous est impossible de déterminer dans quelle mesure l'éducation influe sur le processus de formation d'une union. Comme notre but premier était d'évaluer l'effet direct de la séparation des parents sur la formation d'une union, et non de modéliser les processus entrecroisés du niveau de scolarité et de la formation d'une union, nous avons refait l'analyse en omettant la variable « éducation » de l'équation. L'exclusion de cette variable n'a eu pratiquement aucun effet sur les coefficients des autres variables, incluant ceux de la variable séparation/divorce des parents.

<sup>5</sup> Comme dans le cas de la cohabitation, l'exclusion de la variable « éducation » n'a eu pratiquement aucun effet sur les coefficients des autres variables, incluant ceux de la variable séparation/divorce des parents.

<sup>6</sup> Comme nous l'avons indiqué dans la note 4, ces processus ne sont pas indépendants les uns des autres variables.

Il semble également y avoir un lien entre le niveau de scolarité et la propension des femmes mariées à se séparer : après avoir tenu compte de l'effet des autres caractéristiques personnelles, la probabilité de rupture du mariage augmente avec les années de scolarité. Cet effet pourrait être lié à la plus grande autonomie financière des femmes plus instruites, pour qui la séparation ou le divorce peut sembler une option plus envisageable. Enfin, la probabilité de dissolution du mariage est plus élevée chez les femmes catholiques et protestantes non pratiquantes que chez les femmes qui ne déclarent aucune religion, alors que, chez les hommes, la probabilité de dissolution d'une union de fait est plus élevée chez ceux qui déclarent une autre religion.

## 5. Conclusion

Les données que nous avons utilisées pour cette étude ne sont pas sans lacunes. Cependant, compte tenu de toutes les précautions qui ont été prises pour assurer la validité de notre analyse, nous sommes convaincus de sa pertinence comme étude sur la transmission des perturbations familiales d'une génération à une autre. Les études récentes indiquent toutes que les transformations familiales sont en hausse au Canada et que des changements dans le milieu familial dans lequel vivent les enfants sont à prévoir pour une proportion croissante de Canadiens. Certes, les répercussions à long terme de la séparation des parents et de la reconstitution des familles sur les enfants sont nombreuses et dépassent largement la portée des effets socio-démographiques étudiés ici. Néanmoins, toute recherche qui fournit une mesure quantitative de la façon dont ces phénomènes risquent d'influencer la manière dont les générations futures commenceront leur vie en tant que couples et parents est importante pour comprendre la dynamique intergénérationnelle.

Plusieurs de nos conclusions viennent corroborer des résultats obtenus dans le cadre de recherches antérieures, notamment quant au lien entre la séparation ou le divorce des parents et la manière dont les enfants commencent leur vie conjugale. La séparation (ou le divorce) des parents tend à augmenter de façon significative la probabilité que les descendants fassent d'abord l'essai de la cohabitation et il diminue (du moins chez les femmes) leur probabilité d'opter d'abord pour le mariage. La séparation des parents a également été associée au fait d'avoir un enfant hors union ou hors mariage chez les jeunes

Ces résultats viennent renforcer l'hypothèse voulant qu'il y ait un lien entre l'instabilité familiale vécue durant l'enfance et les comportements manifestés par les jeunes adultes lorsqu'ils commentent leur vie de couple et de parents. Dans une perspective intergénérationnelle, l'instabilité familiale durant l'enfance a souvent été définie comme un facteur déterminant qui contribue aux difficultés économiques qu'éprouvent les jeunes à l'âge adulte.

Notre compréhension de la transmission intergénérationnelle du divorce pourrait être améliorée par l'utilisation de variables plus qualitatives et de facteurs intermédiaires, comme ceux utilisés en sciences du développement. À titre d'exemple, nous serions sans doute mieux en mesure de comprendre l'impact de cet événement vécu durant l'enfance sur les comportements conjugaux et parentaux des jeunes adultes, si nous pouvions tenir compte des premiers effets qu'a eus l'éclatement de la famille sur l'attitude des enfants à l'égard des rôles sexuels et de la familiale. Les données de l'ESG de 1995, qui ont été diffusées en février 1997, permettront d'élaborer un modèle beaucoup plus complet et satisfaisant, à la fois parce qu'elles fournissent des renseignements plus précis sur les circonstances qui ont mené à la séparation des parents et qu'elles incluent davantage de données qualitatives.

L'équité entre générations fait habituellement référence aux transferts économiques, d'une génération à la suivante. De toute évidence, Chapitre 6, Incidence de la rupture d'union



Tableau 6.3  
Incidence de la séparation ou du divorce des parents sur la propension des jeunes  
adultes à vivre une séparation ou un divorce

Ensemble des unions	Cohabitation		Mariage		Femmes	Hommes
	Femmes	Hommes	Femmes	Hommes		
A. Modèle restreint						
Séparation/divorce des parents	1,159	1,117	1,752	3,102 *	1,702 ***	1,671 **
B. Modèle complet						
Séparation/divorce des parents	1,019	1,182	1,028	2,783 *	1,167	1,348
Diplôme d'études secondaires	0,835	0,934	1,473	0,400	1,005	0,833
Études postsecondaires	1,214	0,921	2,758 **	0,955	1,548 *	0,916
Études collégiales	0,980	1,011	4,113 ***	0,852	1,494	0,967
(Aucun diplôme d'études secondaires)						
Québec (reste du Canada)	0,570**	0,839	0,722	0,811	0,644 *	0,928
Catholique pratiquant <sup>1</sup>	0,862	1,017	1,144	0,310	0,756	0,829
Catholique non pratiquant	0,965	0,812	4,479 **	1,333	1,197	0,818
Protestant pratiquant	0,756	1,416	0,850	0,508	0,634 *	1,069
Protestant non pratiquant	0,803	0,944	2,965 *	1,174	1,068	1,043
Autre religion	2,060	4,395 **	1,049	0,391	0,860	2,468*
(Aucune religion indiquée)						
Âge à la première union	(moins de 18)	(moins de 20)	(moins de 20)	(moins de 22)	(moins de 18)	(moins de 20)
Femmes	18 à 19 ans	0,857			0,946	
	20 à 22 ans	0,921	0,306 ***		0,659 *	
	23 ans et +	0,588 *	0,207 ***		0,473 ***	
Hommes	20 à 21 ans	1,067			1,061	
	22 à 24 ans	0,812	2,458		0,863	
	25 ans et +	1,021	2,400		1,050	
Marisés <sup>2</sup>	0,390 ***	0,258 ***			0,263 ***	0,127 ***

Source : Calculs des auteurs, basés sur l'Enquête sociale générale de 1990 de Statistique Canada.

Note : L'analyse est basée sur un échantillon formé de 970 femmes (462 dont la première union a été une union de fait et 508 pour qui ce fut le mariage) et de 849 hommes (431 unions de fait et 418 mariages). Des données pondérées sont utilisées tout au long de l'analyse et la catégorie de référence est indiquée entre parenthèses.

\* Significatif à 0,05  
\*\* Significatif à 0,01  
\*\*\* Significatif à 0,001

<sup>1</sup> Pratiqueur s'entend d'une personne qui a assisté à une cérémonie ou une rencontre liée à sa religion (excluant les occasions spéciales telles que les mariages, les funérailles ou les baptêmes) au cours des 12 derniers mois.

<sup>2</sup> Défini comme une variable variant dans le temps, selon la définition indiquée dans le texte.

Le fait de marier son conjoint de fait réduit sensiblement le risque de séparation chez les personnes qui ont commencé leur vie conjugale par la cohabitation. À partir du moment où la personne se marie, le risque de séparation de- vient quatre fois moins élevé chez les hommes (par comparaison à ceux qui continuent de vivre en union libre) et il diminue de 60 % chez les femmes.

Quelques autres variables incluses dans l'analyse ont un lien fort et constant—tous types d'unions et sexes confondus—avec le risque de séparation à l'âge de jeune adulte. Ainsi, la pro- vince de résidence semble avoir une forte inci- dence sur la probabilité qu'une femme vivant en union libre se sépare; cette probabilité est 40 % moins élevée au Québec qu'ailleurs au Canada. (Voir aussi Le Bourdais et Marcil-Grattion, 1996.)



hors union ou avant le mariage) pourrait être reliée à des attitudes moins ouvertes à l'égard de l'activité sexuelle pré-conjugale. Il demeure toutefois difficile d'interpréter, à la lumière des données actuelles, l'effet de la religion sur la probabilité des femmes d'avoir un enfant en bas âge; ceci pourrait être dû en partie à la petite taille des échantillons étudiés et au fait que le degré de pratique religieuse déclaré par les femmes au moment de l'enquête pourrait différer de celui qui prévalait durant leur adolescence.

## Dissolution de l'union

Il a été démontré que la séparation ou le divorce des parents a une incidence, non seulement sur le processus de formation d'une famille chez les descendants, mais également sur la probabilité que les descendants eux-mêmes vivent une séparation ou un divorce (Amato, 1996). Afin d'étudier cette question plus à fond, nous avons examiné la probabilité de la dissolution de l'union entre l'âge de 15 et 34 ans, mais uniquement pour les répondants âgés de 25 à 34 ans au moment de l'enquête. Les répondants âgés de 15 à 24 ans ont été exclus, afin de ne pas surreprésenter une cohorte d'âge qui en était encore aux premiers stades de la vie conjugale, à savoir les personnes qui étaient très jeunes lorsqu'elles se sont mariées ou ont commencé à vivre avec un partenaire et qui sont donc plus « à risque » de vivre la dissolution de leur union, tôt durant leur vie.

En plus des variables comprises dans l'analyse sur la formation d'une famille, nous avons également inclus l'âge du répondant au moment de la première union. Compte tenu des différences qui existent entre les hommes et les femmes sur ce dernier point, les catégories d'âge utilisées pour l'analyse diffèrent d'un sexe à un autre. Les unions de fait menant à un mariage sont considérées comme une seule union dont la forme a évolué au fil des ans; une covariable à variation temporelle, qui tient compte du mariage à partir du moment où cet événement survient dans la vie du répondant, a été ajoutée au modèle. (La variable nominale qui représente le mariage prend la valeur de 1 à partir du moment où des conjoints de fait se marient. Dans les autres cas, sa valeur est de zéro.)

Comme l'indique le tableau 6.3, la séparation ou le divorce des parents semble faiblement liée à la probabilité qu'un descendant fasse l'expérience de la dissolution de son union de fait. La séparation (ou le divorce) augmente

légèrement la probabilité que les hommes et les femmes vivant en union de fait se séparent, mais les coefficients ne sont pas significatifs au niveau de 0,05; elle multiple toutefois de 1,7 fois la probabilité qu'une femme mariée vive la dissolution de son union et cette probabilité triple, dans le cas des hommes mariés. Cependant, compte tenu de la taille des échantillons, seul ce dernier coefficient est significatif au niveau de 0,05. La séparation des parents semble en outre avoir un effet similaire sur la probabilité de séparation des hommes et des femmes, lorsque les unions de fait et les mariages sont regroupés dans une seule catégorie. Par comparaison aux personnes mariées ou vivant en union de fait qui ont vécu dans un milieu familial stable, les répondants dont les parents se sont séparés sont environ 1,7 fois plus susceptibles de vivre eux aussi une séparation ou un divorce.

La transmission entre générations du divorce semble se faire en partie par le biais de variables intermédiaires, comme l'âge au moment du mariage ou de la cohabitation (Amato, 1996). Par conséquent, lorsque d'autres covariables sont incorporées dans le modèle, tous les coefficients associés à la séparation des parents diminuent sensiblement pour les femmes (comparer les coefficients des volets A et B au tableau 6.3). Ces résultats viennent corroborer l'hypothèse du processus de médiation proposé par Amato. Dans le cas des hommes, toutefois, les coefficients associés à la séparation des parents demeurent pratiquement inchangés après inclusion des autres covariables dans l'analyse, ce qui laisserait sous-entendre que la transmission intergénérationnelle du divorce se fait directement dans leur cas.

L'âge au moment de la formation de l'union semble étroitement lié à la tendance à vivre un divorce ou une séparation chez les femmes, mais il ne semble pas y avoir de lien significatif chez les hommes. La probabilité d'une séparation tend par ailleurs à être moins élevée chez les femmes qui étaient plus âgées au moment où elles se sont mariées ou ont commencé à vivre en union de fait. À titre d'exemple, cette probabilité pour les femmes âgées de 23 ans ou plus lorsqu'elles ont commencé à vivre avec un conjoint de fait n'est que de 60 % de celle observée chez les moins de 21 ans; de même, elle est de 70 % moins élevée chez les femmes qui se marient avant l'âge de 20 ans que chez celles qui le font entre 20 et 22 ans que chez celles qui le font plus tard. La probabilité qu'elles ont commencé à vivre avec un conjoint de fait n'est que de 60 % de celle observée chez les moins de 21 ans; de même, elle est de 70 % moins élevée chez les femmes qui se marient avant l'âge de 20 ans que chez celles qui le font entre 20 et 22 ans; de même, elle est de 70 % moins élevée chez les femmes qui se marient avant l'âge de 20 ans que chez celles qui le font plus tard.

Tableau 6.2

Incidence de la séparation ou du divorce des parents sur la propension des jeunes filles à avoir un enfant avant l'âge de 20 ans

A. Modèle restreint			
Ensemble	Naissances des premières	Naissances hors union	Naissances avant le mariage
B. Modèle complet			
Séparation/divorce des parents	1,682***	1,890**	1,815**
Séparation/divorce des parents			
Diplôme d'études secondaires	0,463***	0,362***	0,304***
Études postsecondaires	0,198***	0,216***	0,197***
Études collégiales	0,034**	0,020***	0,014***
(Aucun diplôme d'études secondaires)			
15 à 24 ans (25 à 34 ans)	0,646**	1,017	0,880
Québec (reste du Canada)	0,692	0,760	0,794
Catholique pratiquant <sup>1</sup>	0,882	0,783	0,769
Catholique non pratiquant	1,963*	1,659	2,089*
Protestant pratiquant	1,381	0,697	0,756
Protestant non pratiquant	1,412	1,284	1,233
Autre religion	1,749	1,059	1,203
(Aucune religion indiquée)			

Source : Calculs des auteurs, basés sur l'Enquête sociale générale de 1990 de Statistique Canada.

Nota : L'analyse est basée sur un échantillon formé de 2 311 femmes âgées de 15 à 34 ans au moment de l'enquête. Des données pondérées sont utilisées tout au long de l'analyse et la catégorie de référence est indiquée entre parenthèses.

\* Significatif à 0,05

\*\* Significatif à 0,01

\*\*\* Significatif à 0,001

<sup>1</sup> Pratiquant s'entend d'une personne qui a assisté à une cérémonie ou les bapêmes) au cours des 12 derniers mois. spéciales telles que les mariages, les funérailles ou les bapêmes) au cours des 12 derniers mois.

Canada, 1991). Nous obtenons toutefois des résultats très différents, lorsque notre analyse se limite aux naissances hors union; dans ce dernier cas, la cohorte plus jeune semble légèrement plus susceptible d'avoir un enfant durant l'adolescence que la cohorte plus âgée, bien que le coefficient ne soit pas significatif au niveau de 0,05.

Sans égard à l'état matrimonial, les femmes vivant au Québec semblent moins susceptibles d'avoir un enfant avant l'âge de 20 ans que leurs homologues vivant ailleurs au Canada, après « neutralisation » de l'effet des autres caractéristiques personnelles. Cette conclusion est en accord avec des résultats obtenus lors d'autres études sur la fécondité des adolescentes au Canada (Guilbert et Forget, 1991). Il semble également y avoir un lien entre la religion et la

probabilité des femmes d'avoir un enfant, bien que la plupart des coefficients se révèlent ici non significatifs. Seules les catholiques non pratiquantes diffèrent sensiblement des répondantes qui n'ont déclaré aucune religion; les premières sont près de deux fois plus susceptibles d'avoir un enfant durant l'adolescence que celles sans appartenance religieuse (sauf dans le cas des naissances hors union, où l'effet de la religion est moindre). Par ailleurs, les catholiques pratiquantes semblent moins susceptibles d'avoir un enfant avant l'âge de 20 ans que la plupart des femmes ayant déclaré une autre religion ou qui n'en ont déclaré aucune, bien que le coefficient des premières ne diffère pas de façon significative de celui des dernières. La plus faible proportion des femmes catholiques pratiquantes à pension des femmes catholiques pratiquantes à avoir un enfant durant l'adolescence (et des femmes protestantes pratiquantes à avoir un enfant



à l'état matrimonial, les premières sont 1,68 fois plus susceptibles que les dernières à vivre une telle expérience avant l'âge de 20 ans. En outre, les probabilités que la naissance d'un enfant survienne hors union ou avant le mariage sont respectivement de 1,89 fois et 1,82 fois plus élevées chez les premières.

L'effet de la séparation des parents demeure important, même après l'inclusion d'autres caractéristiques dans le modèle; les femmes qui ont vécu la séparation de leurs parents demeurent environ 1,5 fois plus susceptibles que celles qui ont vécu dans une famille stable d'avoir un enfant avant l'âge de 20 ans, quel que soit leur état matrimonial. Il est intéressant de souligner que l'introduction des autres covariables entraîne une réduction plus significative du coefficient associé à la séparation des parents dans le modèle portant uniquement sur les naissances survénant hors union ou hors mariage que dans le modèle qui inclut toutes les naissances. Ce résultat semble indiquer que, dans ces cas, la transmission intergénérationnelle du comportement familial se fait par le biais de processus intermédiaires : la séparation des parents influence sur le niveau de scolarité des enfants, lequel à son tour influence directement sur la probabilité qu'une femme ait un enfant hors union ou hors mariage, à un âge précoce.

De fait, il semble généralement y avoir une forte association entre le niveau de scolarité et la propension des femmes à avoir un enfant à un jeune âge, et cette association est encore plus marquée chez les femmes qui ont un enfant sans vivre avec un partenaire. Chez les femmes ayant terminé leurs études secondaires, la probabilité d'avoir un enfant avant leur 20<sup>e</sup> anniversaire de naissance n'est que de 30 % à 46 % (selon l'état matrimonial) de celle des femmes sans diplôme d'études secondaires et cette probabilité diminue à environ 20 % chez les femmes qui ont fait quelques études post-secondaires et à moins de 5 % chez les femmes qui ont fait des études collégiales.

Lorsqu'on considère l'ensemble des naissances, sans égard à l'état matrimonial de la femme, celles qui étaient âgées de 15 à 24 ans au moment de l'enquête semblent moins susceptibles (le tiers seulement de la probabilité) d'avoir un enfant durant l'adolescence que celles qui étaient âgées de 25 à 34 ans. Ce résultat peut sembler surprenant à première vue, compte tenu de la légère hausse récemment observée au Canada de la proportion des femmes qui ont un enfant au début de l'adolescence (Statistique

L'éducation, par contre, semble influencer de façon similaire sur la propension des jeunes adultes à commencer leur vie conjugale, que ce soit par le mariage ou la cohabitation<sup>5</sup>. Dans les deux cas, un niveau de scolarité plus élevé est associé à une diminution de la probabilité de former une union à un plus jeune âge; cependant, le niveau auquel cette variable commence à exercer un effet diffère, selon qu'il s'agit du mariage ou de la cohabitation. Ainsi, ce n'est qu'au niveau postsecondaire pour les femmes et au niveau collégial pour les hommes qu'il existe un lien significatif entre l'éducation et la réduction de la probabilité de mariage chez les jeunes adultes. Par contre, l'effet sur la probabilité de cohabitation se fait sentir dès le niveau des études secondaires terminées.

### Donner naissance à un enfant, avant l'âge de 20 ans

Des études ont démontré un lien entre la séparation des parents et le fait d'avoir un enfant à un âge précoce ou hors mariage. Nous avons choisi de limiter notre analyse sur l'âge de la première naissance en regard du milieu familial durant l'enfance aux répondants de sexe féminin, et ce pour deux raisons. Premièrement, des études antérieures ont démontré que les données rétrospectives sur les antécédents de fécondité sont plus fiables pour les femmes que pour les hommes (Furstenberg, 1988). Deuxièmement, comme certaines naissances chez des jeunes femmes se produisent hors union, il est probable que certains des pères en cause ne soient pas reconnus, ou même informés de leur paternité.

Le tableau 6.2 présente l'impact des différentes variables sur la propension des femmes à avoir un enfant avant l'âge de 20 ans. La première colonne indique la probabilité qu'une femme donne naissance à un enfant—quel que soit son état matrimonial—alors que les deuxième et troisième colonnes indiquent les probabilités d'avoir un enfant hors union ou avant le mariage. La plupart des variables ont un effet similaire sur la probabilité qu'une femme donne naissance à un enfant, sans égard à son état matrimonial; en général, toutefois, cet effet est plus marqué dans le cas des naissances qui surviennent hors union ou hors mariage.

Les femmes qui ont vécu la séparation ou le divorce de leurs parents semblent beaucoup plus susceptibles d'avoir un enfant avant leur 20<sup>e</sup> anniversaire de naissance que celles qui ont grandi dans un milieu familial stable : ainsi, sans égard



Tableau 6.1 Incidence de la séparation ou du divorce des parents sur la propension des jeunes adultes à vivre en union libre ou à se marier avant l'âge de 25 ans

	Cohabitation		Mariage	
	Femmes	Hommes	Femmes	Hommes
A. Modèle restreint				
Séparation/divorce des parents	2,095***	2,000***	0,557***	0,820
B. Modèle complet				
Séparation/divorce des parents	1,756***	1,716***	0,584***	0,869
Diplôme d'études secondaires	0,713**	0,716*	1,078	1,192
Études postsecondaires	0,635***	0,685***	0,501***	0,828
Études collégiales	0,385***	0,403***	0,302***	0,400***
(Pas de diplôme d'études secondaires)				
15 à 24 ans (25 à 34 ans)	1,196*	1,113	0,406***	0,397***
Québec (reste du Canada)	1,533***	1,958***	0,719**	0,589**
Catholique pratiquant <sup>1</sup>	0,572***	0,429***	1,642**	1,684*
Catholique non pratiquant	0,943	0,651*	1,104	1,133
Protestant pratiquant	0,540***	0,473***	1,791***	2,324***
Protestant non pratiquant	1,076	0,765	1,460	1,521
Autre Religion	0,268***	0,215**	2,133**	1,611
(Aucune religion indiquée)				

**Source :** Calculs des auteurs, basés sur l'Enquête sociale générale de 1990 de Statistique Canada.

**Nota :** Les coefficients indiqués ont été obtenus à partir d'un modèle de régression de Cox. L'analyse est basée sur un échantillon formé de 2 283 femmes et de 2 294 hommes âgés de 15 à 34 ans au moment de l'enquête. Des données pondérées sont utilisées tout au long de l'analyse et la catégorie de référence est indiquée entre parenthèses.

\* Significatif à 0,05  
\*\* Significatif à 0,01  
\*\*\* Significatif à 0,001

<sup>1</sup> Praticant s'entend d'une personne qui a assisté à une cérémonie ou une rencontre liée à sa religion (excluant les occasions spéciales telles que les mariages, les funérailles ou les baptêmes) au cours des 12 derniers mois.

cohorte plus âgée. La probabilité de commencer sa vie conjugale par le mariage est également plus faible au Québec que dans le reste du Canada (72 % pour les femmes et 59 % pour les hommes). Enfin, le fait de pratiquer une religion sur une base régulière tend à augmenter de façon significative la probabilité de choisir le mariage de préférence à l'union libre. La probabilité de se marier avant l'âge de 25 ans est de 1,6 à 1,8 fois plus élevée chez les femmes catholiques et protestantes pratiquantes que chez celles qui ne déclarent aucune religion; elle augmente également de plus du double chez les femmes qui déclarent une autre religion. Ces variables exercent, sur la propension des hommes à se marier, des effets similaires à ceux observés chez les femmes, bien que le coefficient associé à une « autre » religion ne semble pas significatif, même s'il est assez élevé.

significatif au niveau de 0,05. Ce résultat pourait être dû au fait que les hommes ont tendance à se marier plus tard que les femmes et que l'échantillon sur lequel est basée l'analyse est assez petit. L'introduction d'autres covariables dans l'analyse ne modifie pas de façon significative l'effet de la séparation des parents sur la probabilité de mariage, comme l'indique la comparaison des coefficients présentés pour les volets A et B dans ce tableau.

Outre l'état matrimonial des parents, trois séries de caractéristiques exercent, sur la probabilité de commencer sa vie conjugale par le mariage, un effet contraire à celui observé chez les personnes qui optent plutôt pour la cohabitation. La probabilité de se marier avant l'âge de 25 ans chez la cohorte d'âge plus jeune n'est que de 40 % environ de celle observée chez la

universitaires<sup>4</sup>. Ces résultats viennent corroborer ceux obtenus dans le cadre de recherches antérieures.

La probabilité qu'une femme vive en union

libre semble également reliée à la cohorte d'âge. Ainsi, les femmes âgées de 15 à 24 ans au moment de l'enquête sont plus susceptibles de vivre d'abord en union libre que celles âgées de 25 à 34 ans, indépendamment des autres caractéristiques. Le même effet s'observe chez les hommes, bien que le coefficient ne soit pas significatif au niveau de 0,05. Le fait de vivre au Québec tend également à augmenter de façon significative la probabilité de cohabitation chez les jeunes, et ce dans une proportion de 50 % chez les femmes et de près du double, chez les hommes. Ces résultats sont liés à l'augmentation des unions de fait parmi les cohortes plus jeunes, en particulier dans la province de Québec.

Fait peu surprenant, la religion influe aussi sur la probabilité de vivre en union libre. Chez les femmes, par exemple, les catholiques ou protestantes qui ont déclaré assister à des cérémonies ou des rencontres religieuses sur une base régulière sont environ deux fois moins susceptibles de vivre d'abord en union libre que les autres; la probabilité de commencer sa vie conjugale par une union de fait ne semble toutefois pas moins élevée chez ces dernières que chez les femmes qui ne déclarent aucune religion. Par ailleurs, les femmes qui ont déclaré une religion autre que le catholicisme ou le protestantisme affichent la plus faible propension à cohabiter, qui n'est que de 27 % de la probabilité observée pour les femmes n'ayant déclaré aucune religion. Enfin, la religion influe de façon similaire sur la probabilité de cohabiter pour les hommes, à la seule différence que la probabilité de vivre en union de fait est moins élevée chez les catholiques non pratiquants que chez les hommes ne déclarant aucune religion.

Le tableau 6.1 montre également que la séparation ou le divorce des parents exerce un effet opposé sur la probabilité qu'une personne se marie ou vive en union libre : la séparation ou le divorce de parents est ainsi associé à une réduction d'environ 40 % de la probabilité qu'une femme commence sa vie conjugale par le mariage alors qu'il double la probabilité que cela se fasse par la cohabitation. La séparation des parents diminue également les probabilités de mariage chez les hommes, quoiqu'il ne semble pas

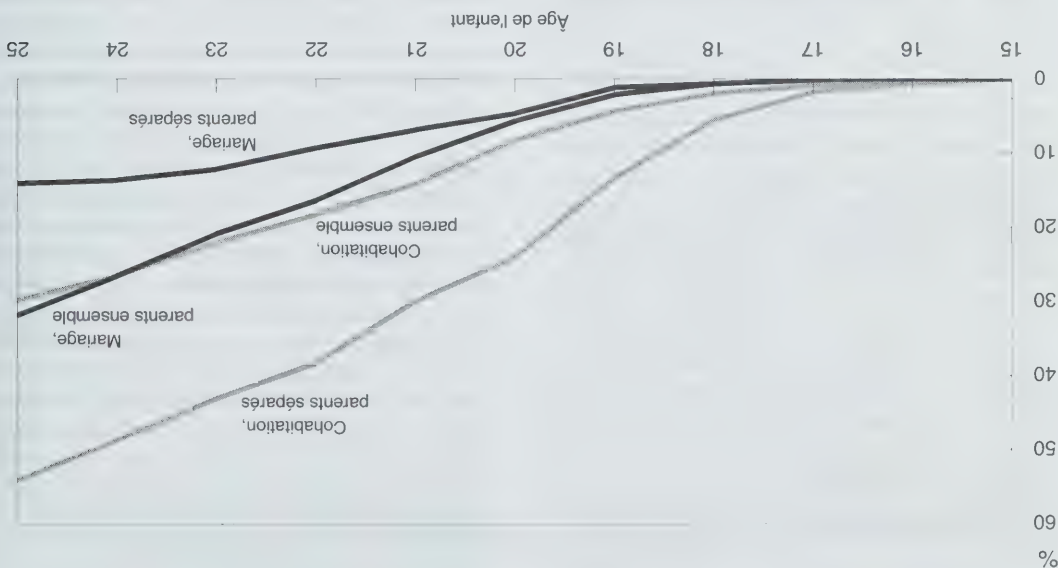
## Formation d'une union avant l'âge de 25 ans

### 4. Résultats

Nous examinons le processus de formation d'une union séparément, selon qu'il s'agit d'un homme ou d'une femme, en raison des différences qui ont été observées entre les deux sexes au niveau des comportements et du moment où il y a formation d'une union. Une distinction est également faite entre les premières unions sous forme de cohabitation et celles résultant du mariage car, comme l'indique le graphique 6.1, la séparation des parents semble avoir un effet opposé sur la vraisemblance des enfants de se marier ou de cohabiter. (Il faut se rappeler que le mariage est considéré comme un risque concurrentiel dans l'étude sur la cohabitation—les personnes qui se marient ne sont plus considérées « à risque » de commencer leur vie conjugale par la cohabitation dès le moment où le mariage se produit.) La séparation ou le divorce est associée à une probabilité deux fois plus élevée que les enfants vivent en union libre avant l'âge de 25 ans, lorsque aucune autre covariable n'est prise en considération (voir volet A du tableau 6.1). Cette relation est à peu près la même pour les hommes et les femmes. Par ailleurs, cette association entre la séparation ou le divorce des parents et la probabilité que les enfants commencent leur vie conjugale par la cohabitation de- meure importante, même lorsque d'autres variables sont prises en considération. À titre d'exemple, les coefficients présentés pour le volet B (tableau 6.1) montrent que, même après avoir tenu compte de l'effet des caractéristiques personnelles, la probabilité que les femmes dont les parents sont séparés ou divorcés vivent en union libre demeure 75 % supérieure à celle observée pour les femmes dont les parents ont servi pour les femmes dont les parents ont continué de vivre ensemble.

Les résultats obtenus indiquent également que la probabilité de cohabitation diminue à mesure que le niveau de scolarité augmente. Comparativement aux femmes qui n'ont pas terminé leurs études secondaires (le groupe de référence), celles qui ont obtenu un diplôme d'études secondaires sont environ 30 % moins susceptibles de commencer à cohabiter avant l'âge de 25 ans et cette proportion atteint 60 % chez les femmes qui ont complété des études

Graphique 6.1  
Probabilité cumulée pour les jeunes femmes de se marier ou de former une union libre avant l'âge de 25 ans, selon que leurs parents sont séparés ou ensemble



à la fois sur la probabilité que les parents se séparent et sur le comportement des enfants au stade de jeunes adultes. L'omission de ces variables du modèle pourrait mener à une estimation biaisée du paramètre de la séparation des parents. Nos résultats doivent donc être interprétés en tenant compte de ce fait, et d'autres recherches, basées sur de nouvelles données, devront être menées pour évaluer cet effet.

Nous examinons différents modèles pour

chaque résultat étudié, d'abord en analysant seulement l'effet de la variable « séparation des parents », puis en y ajoutant une variable à la fois pour évaluer dans quelle mesure chacune de ces caractéristiques influe sur la propension d'une personne à vivre une transition donnée. Seulement deux modèles sont examinés dans ce chapitre. Le premier (désigné modèle restreint) présente l'effet brut de la séparation des parents sur les expériences vécues par les enfants, tandis que le deuxième (modèle complet) indique les effets nets de toutes les variables incluses dans l'analyse. Les estimations des paramètres incluses dans les tableaux sont présentées sous la forme exponentielle ( $\exp\{\beta\}$ ) et expriment donc le risque pour un groupe donné, en proportion du risque de base. Un coefficient égal à 1 indique que les caractéristiques analysées n'ont aucun effet, alors qu'un coefficient de 2,095—comme celui obtenu pour l'exemple figurant à la première colonne du tableau 6.1—indique que le fait de vivre la séparation

Les caractéristiques utilisées comme variables indépendantes sont toutes incorporées dans le modèle comme variables dichotomiques. Outre la variable qui mesure si les parents du répondant sont séparés ou non, les variables indépendantes incluent la cohorte d'âge du répondant (15 à 24 ans et 25 à 34 ans), le niveau de scolarité atteint (études secondaires non terminées, diplôme d'études secondaires, études post-secondaires non terminées, études collégiales non terminées), la région de résidence (province de Québec ou reste du Canada), ainsi que la religion (catholique pratiquant, catholique non pratiquant, protestant pratiquant, protestant non pratiquant, autre religion, aucune religion). Comme toutes ces caractéristiques sont mesurées au moment de l'enquête, elles peuvent différer des caractéristiques du répondant alors qu'il était susceptible de former une union ou d'avoir un enfant. Par exemple, il se peut que dans l'intervalle certaines personnes aient poursuivi leurs études ou aient migré dans une autre province. Cependant, comme nous ne disposons d'aucune donnée rétrospective sur ces attributs du répondant, nous devons utiliser les données mesurées au moment de l'enquête.

Comme nous l'avons indiqué précédemment, l'ESG de 1990 ne fournit pas d'information sur le milieu familial dans lequel l'enfant a grandi. Or, comme on peut s'y attendre, ces variables (revenu familial, niveau de scolarité des parents, pour ne nommer que celles-ci) influent



Nous utilisons une série de tables de survie, regroupées selon l'état matrimonial des parents, pour examiner la probabilité, pour les descendants, de vivre différentes situations conjugales et parentales, incluant la dissolution de leur union, ainsi que le moment où ces événements risquent de survenir. La méthode par tables de survie consiste à calculer, pour chaque situation parentale possible, la probabilité qu'une personne vive une transition familiale donnée en fonction de l'âge. Prenons par exemple les réprouvés dont les parents sont séparés : la probabilité pour ces personnes de commencer leur vie conjugale par le mariage, entre 15 et 25 ans, est déterminée en divisant le nombre de jeunes qui se sont mariés à l'âge considéré par le nombre de jeunes encore « à risque », c'est-à-dire ceux qui ne sont pas encore mariés ou qui ne vivent pas encore en union libre et qui sont toujours sous observation. Aux fins de la présente analyse, cohabitation et mariage sont considérés comme des risques concurrentiels, c'est-à-dire comme des moyens différents de former un couple. En d'autres mots, les personnes vivant en union libre sont considérées comme des cas tronqués dans l'analyse du mariage et elles sont éliminées du groupe « à risque » des qu'elles commencent à vivre avec un partenaire. On fait ensuite le cumul des événements de la table de survie à chaque âge, pour établir la probabilité globale de former une première union par le mariage ou la cohabitation entre l'âge de 15 et 25 ans, selon la situation des parents du répondant.

Les tables de survie des hommes et des femmes sont calculées séparément, de même que celles s'appliquant à chacune des trois transitions à l'étude, à savoir : création d'une première union, naissance d'un enfant et dissolution de l'union. Le graphique 6.1 illustre la probabilité cumulée de se marier ou de vivre en union libre, pour les jeunes filles âgées de 15 à 34 ans au moment de l'enquête. L'examen de ce graphique indique que les jeunes femmes dont les parents sont séparés ont tendance à former une union plus tôt que celles dont les parents vivaient toujours ensemble au moment de l'enquête (à l'âge de 20 ans, 14 % des jeunes femmes issues de familles stables avaient commencé à vivre avec un partenaire, par le mariage ou la cohabitation, comparativement à 29 % de celles dont les parents étaient séparés) et [2] que les jeunes femmes dont les parents vivent toujours ensemble choisissent dans des proportions à peu

près égales de se marier ou de cohabiter (environ 30 % dans les deux cas), alors que celles dont les parents sont séparés préfèrent, dans une proportion nettement supérieure, la cohabitation au mariage comme façon de commencer la vie conjugale (à 25 ans, 54 % des dernières vivaient avec un partenaire en union libre, contre seulement 14 % qui étaient mariées). Notre analyse révèle également (données non présentées) que les jeunes filles de parents séparés ont davantage tendance à avoir un enfant tôt que celles dont les parents vivent toujours ensemble (14 % des premières ont eu un enfant avant l'âge de 20 ans, comparativement à 9 % des dernières). Une des limites de la démarche basée sur la table de survie est qu'elle ne permet pas d'évaluer dans quelle mesure l'effet de la séparation des parents sur le comportement de l'enfant est associé à une série de variables intermédiaires ou s'exerce par le biais de ces variables. Pour faire une telle évaluation, nous avons choisi l'« analyse des transitions ». Cette méthode consiste à examiner le calendrier des événements (par exemple le mariage) en regard de variables qui peuvent varier au fil des ans. « Événement » s'entend ici d'un « changement depuis un état mutuellement exclusif à un autre état, qui survient à une période précise et connue » (Luke, 1993, p. 205).

L'analyse des transitions réunit deux types d'approche, soit : [1] l'approche basée sur la table de survie, qui mesure la probabilité et le calendrier des événements, et [2] l'analyse de régression qui vise à distinguer les effets nets des variables sur une variable dépendante. Dans l'analyse des événements, la fonction de transition, c'est-à-dire la probabilité instantanée de vivre une transition d'un état à un autre (par exemple, de passer de l'état de célibataire à ce-lui de personne mariée), est modélisée. Nous avons utilisé le modèle semi-paramétrique pour étudier l'effet de la séparation des parents sur les comportements de l'enfant à l'âge adulte. Dans ces modèles, le taux instantané de transition est représenté par une fonction de deux composantes exprimée par  $h(t) = h_0(t)\exp\{\beta X\}$ . La première composante,  $h_0(t)$ , représente le quotient instantané de base sous-jacente, qui varie au fil des ans mais dont la forme est non spécifiée; la deuxième composante contient le paramètre ( $\beta$ ) à estimer et mesure les effets, sur le quotient instantané de base, d'une série de caractéristiques individuelles ( $X$ ) dont certaines peuvent varier au fil des ans (Cox, 1972).

sorte que des liens peuvent être établis avec l'état matrimonial de ses parents. Il y a lieu toutefois de préciser que l'information sur la situation familiale des parents est fragile et très fragmentaire : la seule information dont nous soyons certains est celle concernant la situation des parents du répondant (toujours ensemble) au moment de l'enquête.

Comme nous n'avons aucune information sur le « moment » de la séparation des parents, nous avons pris plusieurs précautions pour assurer la validité de notre analyse. Premièrement, nous avons limité notre échantillon aux jeunes répondants, c'est-à-dire aux hommes et aux femmes de 15 à 34 ans au moment de l'enquête. Ces répondants font partie des générations les plus susceptibles d'avoir vécu le divorce de leurs parents. Il s'agit de personnes nées entre 1956 et 1974, les plus âgées étant au seuil de l'adolescence lorsque la *Loi sur le divorce* de 1968 a été adoptée. De plus, comme il nous est impossible d'établir avec précision le moment de la séparation des parents, nous considérons plus prudent de limiter l'analyse aux générations plus jeunes pour qui la séparation des parents s'est produite alors que les jeunes vivaient toujours à la maison ou peu de temps après, la variable dérivée n'est donc qu'une variable d'approximation du moment de la séparation. Deuxièmement, diverses mesures ont été prises pour tenter de déterminer le plus exactement possible si les parents du répondant ont véritablement vécu une séparation ou un divorce. Parmi les 5 618 répondants âgés de moins de 35 ans au moment de l'enquête, 888 cas—où au moins un des deux parents était décédé—et 32 cas pour lesquels l'information n'était pas suffisante pour classer les parents parmi ceux « vivant ensemble » ont été rejetés, 3 823 cas de parents « toujours ensemble »—incluant 13 cas où un des parents vivait en établissement et l'autre ne vivait pas avec un autre partenaire<sup>7</sup>. Un autre facteur est venu accroître la validité de notre mesure de la séparation des parents; il a été fait mention d'un nouveau partenaire<sup>8</sup>. Un autre facteur est venu accroître la validité de notre mesure de la séparation des parents; il a été fait mention d'un nouveau partenaire<sup>9</sup>.

En grande partie avant l'âge adulte, les jeunes, la séparation des parents s'est produite

La famille. La première décision que doivent prendre alors les chercheurs est de déterminer si le répondant appartient à la génération des parents ou à celle des enfants. L'Enquête sur la famille de 1984 et l'Enquête sociale générale (ESG) de 1990 fournissent toutes deux des données complètes sur les antécédents conjugaux et parents du répondant. Comme l'Enquête sur la famille de 1984 ne renferme aucune donnée sur l'état matrimonial des parents du répondant, ce dernier a été considéré comme appartenant à la génération des parents. De plus, comme aucune donnée n'a été recueillie sur la trajectoire familiale des enfants des répondants après leur départ de la maison, les analystes ne peuvent étudier les effets de l'éclatement de la famille sur les enfants qu'en regard du moment où l'enfant quitte le domicile familial (Mitchell et coll., 1989).

Même si le cycle de l'ESG de 1986 n'a pas porté sur les questions familiales, des données ont été obtenues sur l'état matrimonial des parents (séparés ou non) du répondant alors que celui-ci était âgé de 15 ans. Aucune donnée n'a toutefois été recueillie sur la situation matrimoniale du répondant, outre sa situation au moment de l'enquête. Gee (1992) a par la suite procédé à une analyse de l'incidence de la séparation des parents sur le niveau de scolarité, le revenu, les pratiques religieuses et la situation socio-économique du répondant, ainsi que sur sa « satisfaction à l'égard de plusieurs aspects de la vie ». La principale lacune de cette étude tient au fait que l'intervalle entre le 15<sup>e</sup> anniversaire de naissance des répondants et l'enquête varie considérablement d'un répondant à un autre; les variables des « résultats », qui toutes mesurent la situation au moment de l'enquête, peuvent donc varier sensiblement de celles observées lorsque le répondant avait 15 ans. À titre d'exemple, la variable « actuellement marié » n'indique pas s'il s'agit pour le répondant d'un premier mariage ou d'un remariage, pas plus qu'elle n'indique l'âge auquel le mariage a eu lieu. Enfin, la situation familiale à l'âge de 15 ans—quelle que soit sa concordance avec l'expérience vécue par l'enfant—ne reflète pas les transitions familiales que le répondant pourrait avoir vécues à un plus jeune âge.

L'ESG de 1990, sur laquelle s'appuie la présente analyse, ne fournit pas de meilleures données que les enquêtes antérieures sur l'expérience familiale du répondant durant l'enfance. Elle constitue néanmoins une nette amélioration, en ce qu'elle fournit des données sur les antécédents matrimoniaux du répondant, de



(ESG) de 1990. Mitchell, Wister et Burch (1989), de même que Gee (1992), ont fait quelques travaux novateurs dans ce domaine, les premiers analysant les conditions et le moment où les enfants ont quitté la maison en fonction des antécédents conjugués des parents, alors que la dernière a étudié l'incidence de la structure familiale durant l'enfance sur diverses caractéristiques des enfants, notamment sur leurs pratiques religieuses, leur rendement scolaire et leur situation socio-économique.

## 2. Données disponibles

Toute étude sur la transmission des comportements familiaux entre générations doit s'appuyer sur des données d'enquête. Les enquêtes longitudinales, qui suivent les enfants depuis la naissance jusqu'à l'âge adulte et qui tiennent compte de tous les événements ou des variables qualitatives qui modifient le milieu familial au fil des ans, constituent la source idéale. De telles enquêtes permettent en effet d'évaluer l'influence qu'exerce chaque facteur à l'étude sur le comportement de l'enfant lorsque celui-ci quitte la maison familiale, commence sa vie conjugale et devient parent. Comme nous l'avons indiqué précédemment, la *National Child Development Study* en Grande-Bretagne s'est appuyée sur une telle démarche longitudinale; au Canada, nous avons maintenant l'Enquête longitudinale nationale sur les enfants et les jeunes.

Les données longitudinales recueillies par panel présentent toutefois un grand inconvénient, qui est imputable à la très longue période nécessaire pour l'élaboration de ces données. Il faut attendre que les enfants atteignent l'âge de quitter la maison et de commencer leur propre famille avant de procéder à l'analyse. Une telle démarche présente donc le risque que les données reflètent les conditions propres à la période durant laquelle ont grandi les enfants, mais qu'elles soient périmées au moment où l'analyse peut commencer. Ce problème s'applique à différents degrés à l'étude britannique qui porte sur la cohorte de 1958 car, à cette époque, la perturbation familiale était davantage associée au décès d'un parent qu'au divorce.

Il est plus fréquent que les données longitudinales soient recueillies de façon rétrospective, comme dans le cas de l'Enquête sociale générale de Statistique Canada. Cependant, ces données ont elles aussi certaines limites, dues principalement au fait qu'elles portent inévitablement sur une seule génération de membres de

[6] sont plus susceptibles de vivre eux-mêmes la dissolution de leur union que ceux issus de familles stables; leur union dure également moins longtemps (Gee, 1992; McLanahan et Bumpass, 1988; Keith et Findlay, 1988; Webster et coll., 1995).

Différentes théories ont été proposées pour expliquer le transfert entre générations des comportements conjugués et parentaux, dont une qui s'appuie sur une perspective socio-économique. La plupart des observateurs s'entendent pour dire que le niveau socio-économique exerce un effet global sur la transmission des comportements familiaux. À titre d'exemple, comme les mères seules et leurs enfants éprouvent souvent des difficultés économiques, il est fort possible que les enfants de parents divorcés aient un niveau de scolarité, un revenu et un emploi inférieurs. En outre, un faible niveau économique est en soi associé à des difficultés conjugales et à des risques accrus de divorce, même si l'on ne peut pas toujours établir clairement lequel des deux facteurs—entre les antécédents familiaux et la faible situation économique—est déterminant.

De toute évidence, tous ces effets ne sont pas indépendants les uns des autres : un mariage à un jeune âge est souvent, en soi, un bon prédicteur de la dissolution du mariage, que la personne ait vécu ou non l'éclatement de sa famille durant son enfance. Plusieurs auteurs ont donc senti le besoin d'introduire des variables intermédiaires pour expliquer la transmission du divorce d'une génération à une autre. Amato (1993), par exemple, traite de l'impact potentiel des conflits entre parents sur l'attitude des enfants à l'égard du mariage et du divorce, laquelle attitude influe à son tour sur leurs comportements à l'égard de la famille. Amato (1996) cite également la capacité d'établir des relations intimes de qualité, laquelle peut dépendre dans une grande mesure de la qualité des relations qu'entretenaient les parents et du modèle qui a été présenté aux enfants durant leur enfance. Amato sert toutefois une mise en garde à l'égard des analyses qui tenteraient d'imputer à un seul facteur les effets négatifs observés chez les enfants. Il suggère plutôt d'élaborer un modèle plus général regroupant plusieurs variables qui attendent ou accentuent les effets potentiels du divorce des parents sur les enfants.

Relativement peu d'analyses sur l'incidence intergénérationnelle du divorce des parents ont été menées au Canada, principalement à cause de l'absence de données adéquates, du moins avant la tenue de l'Enquête sociale générale



dont leurs enfants commençait à leur tour leur vie comme couples et parents.

Les recherches sur ce sujet ont connu une forte progression durant les années 90. Kierman et Chase-Landale (1995), Axinn et Thornton (1996) et surtout Amato (1996) ont tous trouvé des moyens ingénieux d'élargir leur analyse. Bien que les données soient encore insuffisantes dans un nombre appréciable de cas, nous disposons aujourd'hui de données de plus en plus nombreuses qui tendent à démontrer que le divorce (ou la séparation) des parents est associé non seulement à un risque accru de divorce chez les enfants, mais également à plusieurs autres types de comportement.

En termes plus précis, des recherches récentes montrent que les enfants de parents séparés ou divorcés :

- [1] ont tendance à quitter la maison plus tôt et à le faire pour des raisons plus négatives, par exemple à cause de conflits ou de frictions, que ceux dont les parents sont restés ensemble (Goldscheider et Chérin, 1992; Kierman, 1995; Mitchell et coll., 1989; Young, 1987);

- [2] ont des relations sexuelles pré-conjugales plus tôt et plus fréquentes (Thornton et Camburn, 1987; McLanahan et Bumpass, 1988; Gabardi et Rosen, 1992);

- [3] sont plus susceptibles de vivre d'abord en union libre que de se marier (Kierman, 1992; Chérin et coll., 1995; Thornton, 1991; Furstenberg et Teitler, 1994);

- [4] s'il y a mariage, les jeunes filles de parents séparés ou divorcés ont tendance à se marier plus tôt que les autres (Mueller et Pope, 1977; Glenn et Kramer, 1987; il semble également y avoir un lien entre un mariage précoce et le remariage des parents de la jeune fille (Goldscheider et Goldscheider, 1989; Keith et Findlay, 1988) ainsi que le fait que leurs mères s'étaient mariées jeunes et étaient enceintes au moment du mariage;

- [5] que les filles imitent ou non le comportement de leur mère, celles de parents divorcés ou séparés ont tendance à avoir leur premier enfant plus tôt et plus souvent hors mariage que celles dont les parents sont restés ensemble;

établir un lien de causalité direct entre, d'une part, l'écclatement de la famille durant l'enfance et, d'autre part, les attitudes et les comportements à l'égard de la vie de famille, pouvons-nous observer tout au moins des liens significatifs entre ces deux séries de variables?

Ces questions sont depuis longtemps à la base de nombreuses études en psychologie et sciences du comportement (Wallerstein, 1991). Ces études, qui s'appuyaient essentiellement sur des observations cliniques, ont d'abord cherché à mesurer les conséquences immédiates de l'instabilité familiale sur le développement de l'enfant (par exemple, l'incidence de l'écclatement de la famille sur l'estime de soi ou encore sur l'adaptation sociale et le rendement scolaire) puis, peu à peu, ces études se sont intéressées davantage aux effets à plus long terme.

Dans le domaine des sciences sociales, et plus particulièrement celui de la démographie, l'intérêt pour l'étude de l'impact de la séparation des parents sur les enfants est beaucoup plus récent. En effet, si l'on fait exception des chercheurs britanniques qui ont commencé à s'intéresser à cette question avec les enquêtes de suivi longitudinal de la cohorte de 1958—connues sous le nom de *National Child Development Study*, ce n'est que depuis le début des années 80 que les sociologues et les démographes ont commencé à analyser ce processus relativement à des échantillons représentatifs d'enfants.

Blau et Duncan (1967) ont introduit la notion de la transmission des caractéristiques sociales d'une génération à une autre, en montrant que les enfants de parents de faible statut socio-économique avaient tendance à présenter un profil de réussite et un statut similaires à ceux de leurs parents. S'appuyant sur une démarche similaire, McLanahan (1985) a démontré que l'on pouvait établir un lien manifeste entre la répétition de la pauvreté, d'une génération à une autre, et le fait pour un enfant de vivre dans une famille monoparentale dirigée par une femme. Par cette étude, McLanahan (1985) a été l'une des premières à établir un lien direct entre le niveau socio-économique et les indicateurs de la vie familiale.

Au milieu des années 80, de nouvelles variables démographiques ont été introduites dans les analyses, en particulier aux États-Unis où des données plus étayées étaient disponibles. McLanahan et Bumpass (1988), de même que Thornton (1991), ont étudié les liens entre l'évolution de la vie familiale des parents et la façon

# Incidence de la rupture d'union des parents durant l'enfance sur le comportement démographique des jeunes adultes

CÉLINE LE BOURDAIS ET NICOLE MARCIL-GRATTON

Le concept d'« équité entre générations » a pour fondement principal la notion d'équilibre entre les contributions économiques d'une génération et celles des générations qui la précèdent ou la suivent. Il se pourrait toutefois que la transmission du bien-être économique se fasse par le biais du transfert des caractéristiques et des comportements sociaux, d'une génération à une autre. Les trajectoires de la vie familiale font manifestement partie de ces caractéristiques et la façon dont le cycle de pauvreté se perpétue à l'âge adulte en est un exemple éloquent. Ainsi, la répartition de la pauvreté pourrait très bien être le résultat des comportements sociaux adoptés par les enfants lorsqu'ils atteignent l'âge adulte et deviennent des parents. Nous avons choisi de traiter, dans ce chapitre, de l'incidence des bouleversements dans la vie familiale sur la transition à l'âge adulte, parmi les premières générations d'enfants canadiens dont une portion importante ont vécu le divorce de leurs parents.

Le divorce, notamment depuis les modifications législatives adoptées en 1968, est devenu une réalité pour un nombre croissant de familles canadiennes. De fait, si les conditions actuelles devaient persister, environ 40 % de tous les mariages se solderont par un divorce (Dumas et Péron, 1992). Le mariage lui-même semble avoir perdu de la popularité. En effet, la majorité des jeunes Canadiens et Canadiennes commencent aujourd'hui leur vie conjugale par la cohabitation (Le Bourdais et Marcil-Gratton, 1996). Or la cohabitation demeure un milieu de vie moins stable que le mariage, et des études démontrent que les enfants nés de parents vivant en union libre sont plus susceptibles de vivre la dissolution de leur famille durant l'enfance (Marcil-Gratton, 1993). L'union de fait demeurera-t-elle essentiellement une forme de mariage à l'essai, durant lequel les jeunes veulent juger de leur compatibilité avant de s'engager à long terme?

Ou cette forme d'union est-elle en voie de devenir un choix plus permanent pour les couples qui désirent fonder une famille? La réponse à ces questions varie d'une région à l'autre du pays. Au Québec, par exemple, les statistiques pour 1994 indiquent que près de la moitié (48,5 %) des naissances surviennent chez des mères célibataires (Duchesne, 1996). Dans la grande majorité de ces cas, il s'agit en fait de bébés nés de couples vivant en union de fait. Il se peut donc que la fréquence des divorces ne brosse pas un tableau complet de l'incidence qu'aura l'éclatement de la famille sur les générations d'enfants nés durant les années 90—l'histoire nous le dira.

L'examen des trajectoires suivies par les premières générations d'enfants qui ont vécu le divorce ou la séparation de leurs parents durant l'enfance peut néanmoins jeter une certaine lumière sur l'avvenir de ces enfants. Il semble en effet y avoir un lien entre l'instabilité familiale durant l'enfance et la manière dont les enfants commencent leur vie en tant que couples et parents. Plus précisément, la séparation (ou le divorce) des parents tend à être reliée positivement à la vraisemblance que les enfants vivent en union libre, alors qu'elle réduit la probabilité d'un mariage direct. Ces expériences des parents tendent également à être reliées au fait pour les jeunes femmes d'avoir un enfant tôt, hors union ou hors mariage, ainsi qu'à une augmentation des risques de dissolution de l'union, du moins pour les hommes mariés.

## 1. Nouveaux enjeux

Les « enfants du divorce » ont aujourd'hui atteint l'âge de former des couples et d'avoir des enfants; la vie conjugale et parentale de ces enfants diffère-t-elle de celle des enfants dont le milieu familial est demeuré stable durant toute l'enfance et l'adolescence? Sans nécessairement

- MAYER, Susan E. (1997). *What Money Can't Buy: Family Income and Children's Life Chances*. Cambridge: Harvard University Press.
- McLANAHAN, Sara et Gary SANDEFUR (1994). *Growing up with a Single Parent: What Hurts, What Helps*. Cambridge, Massachusetts: Harvard University Press.
- SHEA, John (1996). « Does (Parents') Money Matter? » Polycopié non publié. Department of Economics, University of Wisconsin.
- SOLOMON, Gary (1992). « Intergenerational Income Mobility in the United States. » *American Economic Review*, Vol. 82, 393-408.
- SOLOMON, Gary, Mary CORCORAN, Roger GORDON et Deborah LAREN (1991). « A Longitudinal Analysis of Sibling Correlations in Economic Status. » *Journal of Human Resources*, Vol. 26, 509-33.
- SOLOMON, Gary, Mary CORCORAN, Roger GORDON et Deborah LAREN (1988). « Sibling and Intergenerational Correlations in Welfare Program Participation. » *Journal of Human Resources*, Vol. 23.
- WILSON, William Julius (1996). *When Work Disappears: The World of the New Urban Poor*. New York: Random House.
- WILSON, William Julius (1987). *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. Chicago: University of Chicago Press.
- ZIMMERMAN, David J. (1992). « Regression Toward Mediocrity in Economic Stature. » *American Economic Review*, Vol. 82, 409-29.



1978 et 1982. Nous avons estimé chacun des modèles figurant au tableau 5.5. La valeur de 1982 était utilisée lorsqu'il a fallu inclure le nombre des frères et sœurs.

<sup>13</sup> Les auteurs fourniront ces résultats sur demande. Seule exception à signaler, l'incidence du nombre de frères et sœurs sur la variable de l'allocation familiale. Comme il est mentionné, cela s'explique du fait que l'allocation familiale n'a pas été mesurée par enfant en particulier.

## Bibliographie

AARONSON, Daniel (1996). « Using Sibling Data to Estimate the Impact of Neighborhoods on Children's Educational Outcomes. » Federal Reserve Bank of Chicago, non publié.

BECKER, Gary S. (1991). *A Treatise on the Family*. Enlarged Edition. Cambridge Massachusetts: Harvard University Press.

BECKER, Gary S. et Nigel TOMES (1986). « Human Capital and the Rise and Fall of Families. » *Journal of Labor Economics*. Vol. 4 Part 2, S1-S39.

BELSLEY, D., E. KUHN et R. WELSCH (1980). *Regression Diagnostics*. New York: John Wiley and Sons.

BJÖRKLUND, Anders et Markus JÄNTTI (1997). « Intergenerational Mobility of Economic Status: Is the United States Different ? » Communication présentée au Annual Meetings of the American Economic Association, New Orleans. (1993). « Do Neighborhoods Influence Child and Adolescent Development ? » *American Journal of Sociology*. Vol. 99, 353-95.

COLEMAN, James S. (1988). « Social Capital in the Creation of Human Capital. » *American Journal of Sociology*. Vol. 94 Supplément, S95-S120.

COOPER, Suzanne J., Steven N. DURLAUF et Paul A. JOHNSON (1993). « On the Evolution of Economic Status Across Generations. » Communication présentée au Annual Meetings of the American Statistical Association, San Francisco California.

CORAK, Miles et Andrew HEISZ (1998). « De père en fils : la mobilité intergénérationnelle du revenu au Canada », Ottawa : Statistique

Canada, Direction des études analytiques, document de recherche n° 113.

CORAK, Miles et Andrew HEISZ (1995). « The Intergenerational Income Mobility of Canadian Men. » *Canadian Business Economics*. Vol. 14, 59-69.

CORCORAN, Mary, Roger GORDON, Deborah LAREN et Gary SOLON (1992). « The Association Between Men's Economic Status and their Family and Community Origins. » *Journal of Human Resources*. Vol. 27, 575-601.

COUCH, Kenneth A. et Thomas A. DUNNE (1997). « Intergenerational Correlations in Labor Market Status: A Comparison of the United States and Germany. » *Journal of Human Resources*. Vol. 32, 210-32.

DUNN, Thomas et Douglas HOLTZ-EAKIN (1996). « Financial Capital, Human Capital, and the Transition to Self-Employment: Evidence from Intergenerational Links. » NBER Document de travail n° 5622.

GOTTSCHALK, Peter (1990). « AFDC Participation Across Generations. » *American Economic Review*. Vol. 80, 367-71.

HARRIS, Shelly et Daniela LUCACIU (1994). « Un aperçu de la création du TIFF. » Rapports de DAL, Réf. No 94-24-01F v1.1. Ottawa : Statistique Canada, Division des données régionales et administratives.

HAVEMAN, Robert et Barbara WOLFE (1995). « The Determinants of Children's Attainments: A Review of Methods and Findings. » *Journal of Economic Literature*. Vol. 23, 1829-78.

HILL, Martha S. et Greg J. DUNCAN (1987). « Parental Family Income and the Socio-economic Attainment of Children. » *Social Science Research*. Vol. 16, 39-73.

JENCKS, Christopher (1992). *Rethinking Social Policy: Race, Poverty, and the Underclass*. New York: Basic Books.

LEVINE, Phillip B. et David J. ZIMMERMAN (1996). « The Intergenerational Correlation in AFDC Participation: Welfare Trap or Poverty Trap? » Institute for Research on Poverty. Document de travail n° 1100-96.

MANISKI, Charles F., Gary D. SANDEFUR, Sara McLANAHAN et Daniel POWERS (1992). « Alternative Estimates of the Effect of Family Structure During Adolescence on High School Graduation. » *Journal of the American Statistical Association*. Vol. 87, 25-37.

Göteborg et à l'Université de Stockholm, aussi bien qu'aux réunions de l'American Sociological Association et à celles de la Society for the Advancement of Socio-Economics tenues en 1997, ainsi qu'à la conférence de Statistique Canada intitulée « L'équité entre les générations au Canada », qui a eu lieu en février 1997. Nous tenons à remercier Ronald Brieger, Nicole Fortin, John Myles et David Zimmerman de leurs commentaires utiles et signaux que la responsabilité du contenu de la présente communication incombe exclusivement aux auteurs et ne doit en aucun cas être attribuée à Statistique Canada.

<sup>1</sup> Corak et Heisz (1995, 1998) et Fortin et Lefebvre (chapitre 4) obtiennent une corrélation de 0,2 en mesurant Y comme étant le logarithme naturel du revenu. Solon (1992) et Zimmerman (1992) estiment que la corrélation pourrait atteindre même 0,4 ou 0,5 aux États-Unis, bien que certains doutes aient été soulevés à cet égard. Voir Shea (1996) et Couch et Dunne (1997).

<sup>2</sup> Brooks-Gunn, Duncan, Kato Kiebanov et Sealand (1993), Corcoran, Gordon, Laren et Solon (1992), Cooper, Durlauf et Johnson (1993) et Wilson (1996, 1987) ne sont que quelques exemples des abondants écrits sur la question aux États-Unis.

<sup>3</sup> Coleman avance également que le nombre de frères et sœurs est une indication du volume de capital social dont dispose chaque enfant au sein de la famille. Il entend essentiellement par cela le temps que les parents sont capables d'offrir à l'enfant. Dans la même optique, le capital social est moindre dans un ménage dont les deux parents travaillent ou dans une famille monoparentale. Cela porte à croire que les résultats que connaîtront les enfants sur le marché du travail sont en relation négative avec le nombre d'enfants, l'état de chef de famille monoparentale et la présence de deux revenus. Ces prévisions sont toutefois confortées également au modèle de Becker.

<sup>4</sup> L'allocation familiale était une subvention démographique universelle fondée sur le nombre d'enfants. Elle était versée à la mère, mais le membre du ménage ayant le revenu le plus élevé devait la déclarer aux fins de l'impôt sur le revenu. Au cours de la période visée par l'analyse, l'allocation familiale totalisait environ 300 \$ par enfant et par année (en dollars de 1986). Elle a été remplacée par le crédit d'impôt pour enfants en 1993. « Autre revenu » est un terme global qui réunit, entre autres, le revenu d'un régime de retraite particulier, les pensions alimentaires, le revenu d'un REER,

<sup>5</sup> Les données sont corrigées pour tenir compte de l'écart d'âge entre l'enfant et le parent et elles sont fondées sur le revenu total du mar- ché touché par l'enfant et le revenu total du père. L'annexe offre plus de précisions à cet égard.

<sup>6</sup> Les erreurs-types dans les résultats des moins-dres carrés sont robustes jusqu'à hétéroscédasticité, comme elles sont basées sur l'estimateur matriciel de la covariance hétéroscédastique de White. Les erreurs-types des régressions de quantiles sont obtenues par une méthode « bootstrap » au moyen de 20 répétitions, les 10<sup>e</sup> et 90<sup>e</sup> quantiles ayant été estimées conjointement.

<sup>7</sup> Il faut souligner que la présente variable indépendante de déclaration de revenus et non simplement si elle travaillait ou non et certainement pas le revenu qu'elle apportait au ménage. (L'influence de ce dernier facteur serait mesurée par la variable relative au revenu du ménage.) Cela dit, il importe de remarquer également que les mères ont probablement produit une déclaration si leur revenu était supérieur au seuil du revenu imposable. Dans ces conditions, la variable révèle beaucoup plus que l'existence d'un bref séjour sur le marché du travail.

<sup>8</sup> Pour qu'il entre dans la catégorie « union libre », le particulier ne devait pas partager le patronyme de la femme ni être plus jeune ou plus vieux qu'elle par une marge supérieure à 15 ans (Harris et Lucaciu 1994).

<sup>9</sup> À titre d'exemple, un test de l'hypothèse nulle de leur exclusion des modèles des moindres carrés aboutit à un résultat catégoriquement négatif : F (6, 158 521) = 82 pour les hommes et F (6, 126 743) = 118 pour les femmes.

<sup>10</sup> Les statistiques F des fils et des filles sont, respectivement, de F (5, 158 521) = 57,7 et F (5, 126 733) = 16,1, la valeur critique à 0,01 étant de 3,02.

<sup>11</sup> Il faut néanmoins garder à l'esprit que le coefficient d'estimation présenté au tableau 5.3 à l'égard du revenu d'un travail autonome sur la base de la régression des quantiles à la médiane et de 48,6, de loin inférieur aux résultats des moindres carrés.

<sup>12</sup> Les indicateurs des effets du premier dollar, par définition, correspondaient à l'unité si un revenu d'une source donnée était constaté au cours d'une année, quelle qu'elle soit, entre

Tableau 5A.3  
Matrices de transition interdécile des fils et des filles

Décile du revenu total du marché du fils									
Pied	2	3	4	5	6	7	8	9	Tête
Décile du revenu total	14,5	12,7	11,3	10,2	9,1	8,4	7,4	6,8	6,0
	12,4	11,9	12,3	11,0	9,9	8,7	8,6	7,0	5,9
	11,4	11,2	11,3	11,1	10,4	9,5	8,7	8,3	6,7
	10,7	10,1	10,5	10,9	11,0	10,6	9,7	8,4	7,2
	9,8	10,1	10,5	11,0	11,1	10,6	10,0	9,5	7,8
	9,3	9,7	9,9	10,0	10,5	11,1	10,4	10,5	9,0
	9,0	8,9	9,1	9,8	10,3	10,8	11,2	11,5	9,6
	8,4	8,6	8,5	9,5	10,4	10,5	11,5	12,8	11,5
	7,7	8,6	8,2	8,8	9,2	10,3	11,8	12,8	14,2
Tête	6,9	7,8	7,5	7,4	8,1	9,5	10,7	12,5	22,1
Décile du revenu total du marché de la fille									
Pied	2	3	4	5	6	7	8	9	Tête
Décile du revenu total	13,6	12,7	11,3	10,2	9,1	8,4	7,4	6,8	6,0
	12,3	11,9	12,3	11,0	9,9	8,7	8,6	7,0	5,9
	11,4	11,2	11,3	11,1	10,4	9,5	8,7	8,3	6,7
	10,7	10,1	10,5	10,9	11,0	10,6	10,0	9,5	7,8
	9,8	10,1	10,5	11,0	11,1	10,6	10,0	9,5	7,8
	9,3	9,7	9,9	10,0	10,5	11,1	10,4	10,5	9,0
	9,0	8,9	9,1	9,8	10,3	10,8	11,2	11,5	9,6
	8,4	8,6	8,5	9,5	10,4	10,5	11,5	12,8	11,5
	7,7	8,6	8,2	8,8	9,2	10,3	11,8	12,8	14,2
Tête	6,9	7,8	7,5	7,4	8,1	9,5	10,7	12,5	22,1

Nota : Les revenus sont corrigés de l'âge, comme le décrit l'annexe.  
Source : Calculs effectués par les auteurs au moyen de données administratives canadiennes, Statistique Canada.

entendre que la composition du revenu était in-  
fluencée par des préoccupations fiscales. Nous  
n'avons supprimé que les observations impor-  
tantes portant sur les valeurs négatives de re-  
venu d'un travail autonome ou de revenu de  
biens. À la manière de Belsley, Kuhn et Welsch  
(1980), si nous posons que  $X$  est la matrice qui  
réunit toutes les observations sur les variables  
explicatives, nous calculons une valeur de levier  
 $h_i = x_i'(X'X)^{-1}x_i$  pour chaque observation et définis-  
sons une observation importante comme étant  
celle pour laquelle  $h_i > 2K/N$ , là où  $K$  est le nom-  
bre de variables explicatives et  $N$  est la taille de  
l'échantillon. Cette méthode a pour effet indirect  
de supprimer un certain nombre d'observations  
se rapportant à des valeurs positives importan-  
tes d'autres sources de revenu. En ce qui con-  
cerne les fils, 1 435 observations ont été  
éliminées d'un total de 159 996, et la donnée  
correspondante relative aux filles est de 1 117,  
d'un total de 127 890. Nous fournirons sur de-  
mande les résultats se rapportant à l'échantillon  
intégral.

Le tableau 5A.1 fournit les séries complé-  
tes de statistiques descriptives des variables  
entrant dans l'analyse de régression  
multidimensionnelle pour ce qui est des fils, tan-  
dis que les mêmes données se rapportant aux  
filles figurent au tableau 5A.2. Pour sa part, le  
tableau 5A.3 offre les matrices de transition  
interdécile qui comparent le revenu du marché  
des fils au revenu total des pères. Les données  
figurant au tableau sont corrigées des écarts  
d'âge entre les pères et les enfants au moyen  
des résidus de la régression  $Y_1 = \gamma_0 + \gamma_1 \text{Age}_1 +$   
 $\gamma_2 \text{Age}_2$ , là où  $i$  représente soit un père ou un en-  
fant et  $Y$  figure le revenu total du marché de l'en-  
fant pour 1994 et le revenu total du père de 1982.  
Les mesures du revenu sont exprimées invaria-  
blement en dollars de 1986.

Notes

Des versions antérieures de la présente com-  
munication ont été données à des séminaires  
tenus à Statistique Canada, à l'Université de



Tableau 5A.2

Statistiques descriptives : filles

Moyenne	Écart- Type	Minimum	Percentile				90 <sup>e</sup> Maximum
			10 <sup>e</sup>	25 <sup>e</sup>	50 <sup>e</sup>	75 <sup>e</sup>	
Revenu total de l'enfant (1994)	18 861	16 690	-79 825	567	7 930	18 016	26 501
Revenu total du marché de l'enfant, 1994	17 856	16 882	-79 825	154	6 091	16 660	25 784
Effets du premier dollar	0,90						
Gains							
Revenu d'un travail autonome	0,15						
Revenu de biens	0,76						
Assurance-chômage	0,15						
Allocation familiale	0,75						
Revenu autre	0,32						
Effets des dollars supplémentaires							
Revenu total du père (1982)	39 597	46 711	-106 405	15 334	24 763	34 191	45 921
Gains	31 057	30 452	0	0	18 524	30 029	40 628
Revenu d'un travail autonome	2 050	12 892	-141 826	0	0	0	0
Revenu de biens	3 998	30 498	-220 820	0	0	467	1 981
Assurance-chômage	466	1 515	0	0	0	0	0
Allocation familiale	453	479	0	0	1	385	771
Revenu autre	1 573	7 290	-289	0	0	0	466
Effets du quartier	18 962	2 852	9 884	15 460	16 977	18 856	20 692
Revenu médian	25 252	22 863	9 423	14 165	16 405	19 698	25 960
Écart-type							
Part de travailleurs autonomes	7,77	3,05	1	5	6	7	9
Part de prestataires de l'a.-c.	19,78	6,64	4	12	15	19	24
Un déménagement	0,16						
Deux déménagements	0,04						
Trois déménagements	0,01						
Province							
Terre-Neuve	0,01						
Nouvelle-Écosse	0,03						
Île-du-Prince-Édouard	0,00						
Nouveau-Brunswick	0,02						
Québec	0,20						
Ontario	0,43						
Manitoba	0,05						
Saskatchewan	0,04						
Alberta	0,10						
Colombie-Britannique	0,11						
Yukon et Territoires du Nord-Ouest	0,00						
Caractéristiques du particulier et de la famille	0,96						
Langue de la majorité	2,69	1,26	1	1	2	3	3
Nombre d'enfants							
Revenu des autres membres	19 063	20 264	-59 423	0	6 068	15 717	26 841
Marié, conjointe occupée	0,84						
Célibataire	0,02						
Union libre	0,01						
Âge du père	47	6,35	28	39	42	46	51
Âge de l'enfant	30	0,92	28	29	30	30	31
Revenu total de l'enfant (1994)	72						

Nombre d'observations = 126,773

Tableau 5A.1  
Statistiques descriptives : fils

Moyenne	Ecart- Type	Minimum	Percentile					Maximum	
			10°	25°	50°	75°	90°		
Nombre d'observations = 158 561									
Revenu total de l'enfant (1994)	27 416	26 303	-361 424	6 842	15 995	25 611	34 920	44 509	2 805 413
Revenu total du marché de l'enfant, 1994	26 626	26 640	-361 424	4 926	14 234	25 094	34 724	44 402	2 805 413
Effets du premier dollar Gains	0.90								
Revenu d'un travail autonome	0.14								
Revenu de biens autonome	0.74								
Assurance-chômage	0.16								
Allocation familiale	0.75								
Revenu autre	0.32								
Effets des dollars supplémentaires (1982)	39 273	47 641	-103 617	15 123	24 424	33 807	45 429	61 521	6 255 197
Gains	30 999	30 890	0	1	18 495	29 723	40 300	52 839	4 491 201
Revenu d'un travail autonome	1 866	11 892	-72 114	0	0	0	0	124	730 464
Revenu de biens autonome	3 932	29 823	-138 690	0	0	416	1 882	7 037	5 094 263
Assurance-chômage	492	1 549	0	0	0	0	0	1 421	12 056
Allocation familiale	461	482	0	0	0	385	771	1 145	3 153
Revenu autre	1 524	7 740	-27 373	0	0	0	459	3 239	960 416
Effets du quartier	18 908	2 866	9 887	15 308	16 912	18 816	20 588	22 460	42 939
Ecart-type	25 011	23 349	9 761	14 151	16 315	19 469	25 565	36 411	479 435
Part de travailleurs autonomes	7.77	3.08	0	5	6	7	9	11	33
Part de prestataires de l'a.-c.	20.10	6.73	4	12	15	20	25	29	47
Un déménagement	0.17								
Deux déménagements	0.04								
Trois déménagements	0.01								
Province	0.01								
Terre-Neuve	0.01								
Nouvelle-Écosse	0.03								
Ile-du-Prince-Édouard	0.00								
Nouveau-Brunswick	0.02								
Québec	0.22								
Ontario	0.42								
Manitoba	0.05								
Saskatchewan	0.04								
Alberta	0.10								
Colombie-Britannique	0.11								
Yukon et Territoires du Nord-Ouest	0.00								
Caractéristiques du particulier et de la famille	0.96								
Langue de la majorité	2.66	1	1	1	2	2	3	4	14
Nombre d'enfants									
Revenu des autres membres	18 334	22 797	-86 267	0	5 075	14 800	25 917	39 272	3 263 450
Marité, conjointe occupée	0.83								
Célibataire	0.03								
Union libre	0.01								
Âge du père	47	6.34	28	39	42	46	51	55	72
Âge de l'enfant	30	0.94	28	29	29	30	31	31	31

façon de faire sera empruntée à l'avenir en raison de la nécessité d'établir un rapport entre l'information sur les secteurs de recensement et les codes postaux ou une variante de ces derniers.) Nous nous reportons à la totalité des déclarations de revenus produites par les Canadiens et Canadiennes en 1982 pour dresser un large éventail de caractéristiques de quartier. Il s'agit de la première année où les codes postaux figuraient presque universellement sur les déclarations : entre 1978 et 1981, quelque 10 % des déclarations n'arboraient aucun code postal; en 1982, la part s'établissait à 1 % seulement. Nous avons effectivement recueilli de l'information sur les quartiers d'après les moyennes de la période de 1978-1982 et, pour tout dire, elle ne différerait pas sensiblement (dans l'ensemble) de celle qui était tirée uniquement des données de 1982. Par ailleurs, les caractéristiques des quartiers attribuées aux ensembles père-fils dans l'échantillon sont celles de 1982. Les variables de quartier que nous avons constituées correspondent au revenu médian de la RTA, à l'écart-type du revenu, à la fraction des déclarants ayant affirmé avoir touché un revenu d'un travail autonome et à la part ayant déclaré avoir touché des prestations de l'a.-c. Nous avons également constitué et expérimenté les variables suivantes : la part des déclarants dont le revenu était inférieur à 50 % du revenu médian canadien; la part dont le revenu était supérieur à 50 % de la médiane canadienne; le total des prestations de l'a.-c. comme proportion du total des gains de la RTA.

Comme nous le mentionnions dans le texte, nous avons constitué une mesure du « capital-social » en nous fondant sur la notion mise de l'avant par Coleman, à savoir qu'il est possible de le calculer (à rebours) par approximation selon le nombre de fois que l'enfant a déménagé. Pour connaître le nombre de fois que le père a déménagé entre 1978 et 1982, nous comparons les codes postaux figurant sur les déclarations de revenus des années successives de la période à l'étude. Nous supposons qu'aucun déménagement n'avait eu lieu au cours de l'année si le code postal ne figurait pas sur la déclaration d'une ou plusieurs années entre 1978 et 1982. Nous ne recensons que les déménagements dont l'existence est établie. Il est possible que cette façon de faire sous-estime le nombre de particuliers qui déménagent plus d'une fois. Toutefois, 13 % seulement de l'échantillon était en cause, à savoir que 87 % avaient fourni un code postal complet.

Nous avons conçu un indicateur qui précise si la déclaration a été produite ou non dans la

langue de la majorité linguistique de la province. Bien évidemment, nombre de personnes ne parlent ni l'une ni l'autre langue officielle et ont pu faire remplir leur déclaration par un tiers. La variable en question n'est donc pas révélatrice de la langue parlée à la maison. Le T1FF renferme également un indicateur du nombre d'enfants que compte le ménage et de son revenu total. On pourrait croire à la possibilité de déduire le nombre d'années d'études postsecondaires faites par l'enfant d'après les renseignements fournis sur la déduction pour frais de scolarité. Or il est difficile de le faire avec quelque certitude et d'établir un rapport avec une personne en particulier, car le père (voire la mère, le conjoint, le père du conjoint, la mère du conjoint, même les grands-parents) peut se prévaloir de la déduction, laquelle peut concerner n'importe lequel des enfants qui fréquentent un établissement postsecondaire. Qui plus est, les frais d'un large éventail d'établissements de formation et d'enseignement peuvent donner lieu à une déduction, non seulement les frais de scolarité de collèges communautaires ou d'universités.

L'échantillon a été soumis à deux restrictions aux fins de l'analyse de régression. D'abord, nous ne retenons que les particuliers dont le père habitait un milieu « urbain » en 1982. Nous vérifions cette condition d'après le deuxième symbole du code de la RTA. Un zéro renvoie à un milieu rural, lequel est susceptible d'être très vaste. S'il est important d'analyser les milieux ruraux, il est peu probable qu'ils s'apparentent à un « quartier », tel que défini aux fins de l'analyse. Nous avons aussi écarté toutes les collectivités comptant moins de 25 déclarants, de telle sorte que la taille des quartiers retenus aux fins de l'échantillon varie entre 25 et 33 026 déclarants. (Nous avons, en effet, effectué des régrossions au moyen de la série de données tant de « rurales » et d'une série de données tant de provenance urbaine que rurale. La taille des quartiers « ruraux » variait de 155 à 74 972 habitants. Nous avons également écarté les observations concernant la région de tri d'acheminement H0M (Saint-Regis), à cause d'inquiétudes au sujet d'une partie des renseignements sur le revenu. Nous serions heureux de fournir sur demande les résultats complets.)

Deuxièmement, les analyses préliminaires nous ont appris que certaines personnes avaient déclaré de très importantes valeurs négatives pour ce qui est du revenu de biens et du revenu d'un travail autonome. Elles étaient souvent com-

pensées par de très grandes valeurs positives du revenu d'autres sources, fait qui donne à



père: [3] ceux qui ont produit une déclaration de revenus mais qui n'étaient liés à aucune famille. Nous utilisons les NAS des ensembles père-enfant pour obtenir de l'information sur le revenu déclaré au formulaire T1 de 1982 du père et à celui de 1994 de l'enfant.

Comme les données recueillies aux fins de l'impôt varient d'années en années selon les modifications apportées à la législation fiscale et les besoins de l'administration, il faut neutraliser les changements susceptibles de se répercuter sur la comparabilité des revenus du père et de ceux de l'enfant au cours de la période à l'étude. Le changement le plus important consiste en la possibilité que les pères aient bénéficié de déductions pour emploi qui n'étaient pas accessibles à leurs enfants devenus adultes environ dix ans plus tard. Nous corrigeons le revenu du père pour tenir compte de cette situation. D'autres changements ont influencé la comparabilité des gains en capital et du revenu de dividendes. Il y a gain ou perte en capital à la suite de l'aliénation d'immobilisations. Une part des gains est imposée à titre de revenu. En 1982, la moitié des gains en capital nets était imposable, tandis que les trois quarts l'étaient en 1994. La fraction imposable des gains en capital figure sur le formulaire T1. Nous corrigeons les données pour tenir compte de la somme intégrale des gains en capital nets. En dernier lieu, les dividendes servis par certaines sociétés canadiennes sont soumis à un facteur de majoration. En 1982, les dividendes provenant des sociétés canadiennes concernées avec lesquelles les contribuables entretenaient des relations sans lien de dépendance étaient multipliés par 1,5 (un facteur de majoration de 50 %) pour obtenir la part imposable. Or, la part des dividendes soumise au facteur de majoration n'est pas dissociable des autres dividendes de source canadienne sur le formulaire T1. En 1994, les dividendes provenant de toutes les sociétés canadiennes étaient imposés après application d'un facteur de majoration de 25 %. Comme il nous est impossible d'accorder un traitement uniforme à long terme à cette variable, nous ne tentons pas de « démajorer » les dividendes.

Nous avons conçu deux mesures du revenu : la première consiste en le « revenu total du marché » avant impôts. Il englobe les gains, les dépenses déductibles des gains, le revenu d'un travail autonome, le revenu de biens et le « revenu total », lequel est composé du revenu total du marché augmenté des transferts gouvernementaux impossibles. Cette mesure

présente un inconvénient majeur, toutefois, soit l'absence d'information sur le soutien du revenu dont bénéficient les pères, laquelle est non imposable et n'est donc pas déclarée. L'indemnisation des accidents du travail entre également dans cette catégorie. Toutefois, nous disposons de données sur le soutien du revenu dont ont bénéficié les fils en 1994. L'instauration de crédits pour la taxe sur les produits et services (TPS) en 1992 augmentait la probabilité que les particuliers à faible revenu produisent une déclaration de revenus, situation qui a permis de recueillir des données appréciables sur les prestations de l'aide au revenu. (Les demandeurs du crédit pour TPS sont nécessairement des prestataires au soutien du revenu.) L'allocation familiale est l'autre source de revenu provenant des transferts gouvernementaux. Il s'agissait d'un programme universel dirigé par le gouvernement fédéral qui prévoyait le versement d'une aide financière mensuelle aux parents ou tuteurs d'enfants à charge. L'allocation familiale était versée aux parents ou tuteurs qui avaient la charge entière ou quasi entière d'un enfant (c'est-à-dire d'un enfant qui n'avait pas de revenus imposables) de moins de 18 ans. Les provinces étaient autorisées à modifier le montant des prestations selon l'âge ou le nombre des enfants que comptait le ménage, à condition que le versement minimal ne soit pas inférieur à 60 % de la prestation normale et que le versement moyen soit égal au versement fédéral. En 1982, la personne qui demandait l'exemption personnelle pour l'enfant, le plus souvent le particulier ayant le revenu le plus élevé, devait inclure l'allocation familiale dans son revenu déclaré. Si aucune exemption personnelle n'était demandée, l'allocation était réputée être ajoutée au revenu du bénéficiaire du chèque, normalement la mère. Par ailleurs, les conjoints pouvaient choisir de partager le revenu de l'allocation familiale.

L'information sur le revenu est mesurée sans exception en dollars de 1986 et corrigée de l'inflation au moyen de l'indice des prix à la consommation, qui s'applique à l'échelle nationale. Aux fins de l'analyse de régression, les composantes du revenu du père sont mesurées en milliers de dollars, tandis que l'âge du père et celui de l'enfant sont mesurés en années, sous forme d'écart par rapport à la moyenne de l'échantillon. « Quartier » s'entend de la région de tri d'acheminement (RTA), laquelle est désignée par les trois premiers symboles du code postal. (Une autre solution consisterait à tirer cette information du recensement de la population de 1981 et à établir des rapports avec l'échantillon. Cette

potentiel des enfants et que le choix du lieu de résidence fasse écho à ces facteurs causaux sous-jacents plutôt qu'à des influences indépendantes.

Cela nous ramène, toutefois, au principal thème qui nous occupe et met en relief la nature complexe du processus qui détermine, en bout de ligne, les expériences que vivront les enfants sur le marché du travail. S'il faut évaluer une politique visant à accroître les transferts de revenu en faveur des enfants en fonction de son effet à long terme comme moyen d'encourager l'autonomie sur le marché du travail, il faut donc comprendre que le processus est complexe et que, s'il est influencé par les ressources économiques dont disposent les parents, d'autres facteurs sont en jeu, des facteurs qui auraient éventuellement un rôle prépondérant.

## Annexe

Nous faisons appel au fichier des familles T1 (T1FF) pour faire le lien entre les dossiers fiscaux des pères et ceux de leurs enfants. Le T1FF est une série de données sur les formulaires T1 que Statistique Canada a traitée de façon à appeler les membres de la famille de chaque déclarant. (Les formulaires T1 sont les principaux formulaires de déclaration annuelle de revenus produits par les particuliers au Canada, et le T1FF englobe l'univers des déclarants.) Les membres du ménage sont identifiés au moyen d'un éventail de stratégies d'appariement, et le fichier est augmenté par imputation des membres non déclarants et par l'ajout de l'information manquante. Les couples (y compris les conjoints en droit et les conjoints de fait) sont assortis au moyen des codes du NAS, y compris le NAS au conjoint lorsqu'il figure sur le T1, de même que du nom et de l'adresse. L'information des zones réservées au nom et à l'adresse permet d'associer les enfants et les parents. Harris et Lucaciu (1994) offrent plus de précisions sur la constitution du T1FF.

Des ensembles père-enfant sont tirés du T1FF pour l'année 1982. Seuls des pères et des enfants non imputés sont retenus. (Il se peut que le père ne soit pas le père biologique et il faut plutôt l'apparenter à l'homme chef de famille.) Seuls les enfants nés entre 1963 et 1966 sont relevés. Trois catégories d'enfant sont exclues [1] ceux qui n'ont pas produit de déclaration de revenus tandis qu'ils vivaient à la maison; [2] ceux qui ont produit une déclaration de revenus et qui étaient liés à une famille ne comptant pas de

certain transferts gouvernementaux à une corrélation négative ou neutre avec les gains à l'âge adulte des enfants.

En règle générale, d'après notre estimation optimale de l'effet indépendant du revenu monétaire, chaque tranche de 1 000 \$ de majoration du revenu du père hausserait de 50 \$ le revenu à l'âge adulte de l'enfant. Dans ces circonstances, un enfant élevé par un père dont le revenu se situait à l'échelon des 10 % au sommet de l'échelle des revenus (et se chiffrait donc à 62 000 \$ en dollars constants de 1986) gagnerait 2 350 \$ de plus que celui qu'avait élevé un père dont le revenu se situait à l'échelon des 10 % au pied de l'échelle des revenus (et se chiffrait aux environs de 15 000 \$). Par comparaison, la présence d'un père ayant déclaré un revenu de biens équivalant, toutes choses étant égales par ailleurs, à une majoration des gains de 50 000 \$ à 60 000 \$. Mais les parents influencent le potentiel des enfants par des moyens autres que l'argent gagné : ils offrent également des modèles de comportement. Or nous constatons que l'effet découlant du modèle de comportement est, à peu de chose près, aussi important que celui du revenu pur. À titre d'exemple, nous reportons aux études actuelles pour former l'hypothèse que le parent du même sexe que l'enfant offrira le modèle de comportement le plus fort : les pères exerceront une plus grande influence sur les fils, et les mères en feront autant sur les filles. Nous observons que pour chaque hausse de 1 000 \$ du revenu du père, le revenu de la fille augmente de quelque 50 \$, tandis qu'une progression de 1 000 \$ du revenu des autres membres du ménage (mère, frères et soeurs) fait croître le revenu de la fille d'environ 80 \$. La situation des fils n'est pas aussi évidente toutefois : le revenu du père et celui des autres membres du ménage exercent une influence de poids à peu près égal sur leur revenu à l'âge adulte.

Les perspectives de l'enfant ont, toutefois, une dimension communautaire. Les adolescents qui ont grandi dans des quartiers dont les habitants avaient un revenu élevé ont tendance à mieux réussir que les autres, tandis que ceux dont le père n'avait pas déménagé ont tendance à bénéficier d'un avantage important par rapport à ceux dont le père avait déménagé plus d'une fois. Malgré cela, il demeure difficile d'estimer avec précision l'influence des quartiers sur les enfants. Il se peut bien que les décisions quant au quartier et au déplacement soient influencées par des caractéristiques non perçues qui influencent également de façon déterminante le



personnes à faible revenu qui, par exemple, sont localitaires, les localitaires étant éventuellement portées à déménager fréquemment. (La structure familiale se prête à des analyses comparables. Par exemple, Manski et coll., 1992, éclairent davantage la question.) Néanmoins, l'exclusion des variables du quartier et de la structure familiale de l'équation d'estimation ne modifie en rien les estimations relatives aux effets du premier dollar ou à ceux des dollars supplémentaires<sup>13</sup>.

## 5. Conclusion

Le processus qui détermine le succès qu'obtiennent les enfants, en bout de course, sur le marché du travail est complexe et multidimensionnel, et il concerne, sans contredit, la famille, la collectivité et l'État. Il va de soi, l'argent joue dans les perspectives de l'enfant. Les enfants de ménages à revenu élevé ont tendance à mieux réussir—parfois par une marge considérable—à l'âge adulte que ceux qui sont issus de ménages à faible revenu. Malgré cela, il est pratiquement certain que des facteurs autres que l'argent font sentir leurs effets. Par ailleurs, il est facile d'exagérer l'influence de l'argent, car nombre d'autres influences déterminent à la fois les perspectives des enfants et le revenu gagné des parents. Il se peut que le revenu des parents témoigne de ces autres facteurs et qu'il ne constitue pas un facteur causal autonome.

Voilà, pour tout dire, le principal thème de notre recherche. L'examen de nous disposons revenu est l'un des moyens dont nous disposons pour cerner le rôle indépendant que joue l'argent comme déterminant des perspectives de l'enfant à l'âge adulte. Si l'argent est le seul facteur décisif, alors un dollar, qu'il provienne de gains, d'un travail autonome, de biens, de transferts gouvernementaux, ou d'une autre source, quelle qu'elle soit, devrait toujours avoir la même influence sur le succès que connaîtra, en bout de ligne, l'enfant sur le marché du travail. Or nous constatons qu'il n'en est pas ainsi. Notre principale constatation tient à ce que les facteurs en rapport avec le type de revenus déclarés par les pères—facteurs qui nous échappent en tant qu'analystes, mais qui ont, supposons-nous, une valeur sur le marché du travail—exercent une influence appréciable sur le potentiel de revenu des enfants sur ce marché. Tout particulièrement, nous observons que la présence de revenu de biens (plutôt que son importance) est en très forte corrélation avec le revenu que les enfants, parvenus à l'âge adulte, tireront à terme du marché. Nous constatons également que la présence de

augmentent respectivement de quelque 70 % et 63 %, et les données correspondantes se rapportant aux filles sont en hausses d'environ 90 % et 45 %. En revanche, le coefficient de revenu de biens n'augmente que de 9,7 % pour les fils et diminue, en fait, de 1,3 % pour les filles. Nous n'avons donc pas totalement tort de fonder nos conclusions sur les coefficients du revenu de biens dans les modèles initiaux.

Il se dégage de ces circonstances que les effets du premier dollar sont beaucoup plus lourds que ceux des dollars supplémentaires. Ainsi, si l'on suppose que l'estimation exacte correspond à 50 \$ par tranche de 1 000 \$ de revenu du père, il faudrait donc que, en moyenne (c'est-à-dire selon les constatations fondées sur les moindres carrés), le revenu du père soit majoré de 23 144 \$ pour indemniser le fils du fait que son père n'était pas un travailleur autonome, de 28 838 \$ pour le dédommager du fait que son père avait touché des prestations d'a.-c., de 62 138 \$ pour compenser le fait qu'il n'avait pas déclaré de revenu de biens. Les données correspondantes s'appliquant aux filles sont de 17 000 \$, 17 008 \$ et 53 960 \$. Les caractéristiques qui sous-tendent ces effets du premier dollar, quelles qu'elles soient, exercent une influence déterminante sur les réalisations des enfants. Cette conclusion générale tiendrait, même si nous devons supposer que la valeur réelle était de 100 \$ par tranche de 1 000 \$.

Les résultats liés aux caractéristiques du quartier et à la structure familiale soulèvent une question comme quant aux variables à inclure dans les modèles. Les modèles que nous utilisons sont tels qu'il est difficile de cerner les mécanismes causaux à l'œuvre, car certaines des variables sont peut-être, en fait, interdépendantes. Les caractéristiques du quartier illustrent le plus distinctement cette difficulté. Elles sont considérées comme exogènes dans le modèle, mais elles sont peut-être le résultat de choix posés par les parents, choix qui, à leur tour, dépendent du revenu, de la motivation ou de la capacité ou du désir qu'ont les parents d'investir dans les perspectives d'avenir de leurs enfants. Cette limite s'applique également, comme il est mentionné à la section 1, à l'interprétation des contrôles visant le nombre de déménagements. L'usage que fait Coleman du concept du capital social offre certainement une théorie qui permet d'interpréter les effets, mais il est possible que la variable ne soit pas exogène et que sa modification soit imprécise dans le cadre à équation unique que nous avons choisi. Parmi les possibilités à envisager figure la situation des



Par exemple, d'aucuns ont avancé que les travailleurs autonomes étaient peut-être plus motivés et plus actifs sur le marché que les travailleurs, et que leur motivation est transmise génétiquement ou autrement aux enfants, déterminant ainsi leur réussite sur le marché du travail (Dunn et Holtz-Eakin, 1996). Dans la même optique, les parents dotés de biens pourraient être considérés comme étant plus prévoyants ou plus aptes à préparer l'avenir, autant de caractéristiques importantes à la réussite sur le marché du travail. En outre, si l'on peut soutenir que la transmission entre les générations de l'état de prestataire de l'a.-c. est liée à des caractéristiques qui font obstacle au succès sur le marché du travail, l'interprétation la plus probable des coefficients de l'a.-c. est celle qui voit dans les effets du premier dollar la transmission des professions d'une génération à l'autre.

Pour sa part, Mayer (1997) soutient qu'un rôle exagéré a été attribué au revenu comme déterminant des résultats qu'obtiendront les enfants et que l'argent n'est pas seul à jouer à ce chapitre. Elle résume ainsi la thèse défendue dans son livre :

Dans la plupart des cas, le revenu supplémentaire des parents augmente effectivement le potentiel de réussite des enfants. Cependant, le revenu des parents ne détermine pas les résultats que connaîtront les enfants autant que l'avaient cru nombre de spécialistes en sciences sociales. Il en est ainsi du fait que des caractéristiques des parents que présentent les employeurs et pour lesquelles ils sont disposés à rémunérer le travailleur, comme les compétences, la diligence, l'honnêteté, la santé et la fiabilité, favorisent également les chances qu'ont les enfants dans la vie, sans égard à leur effet sur le revenu des parents. Les parents d'enfants qui possèdent ces qualités réussissent bien même si les parents ne gagnent pas d'importants revenus. (Mayer 1997, p. 2) [traduction].

Elle enchaine en affirmant que certaines sources de revenus ont des corrélations moins fortes que d'autres avec des caractéristiques observées des parents et que, par conséquent, les coefficients d'estimation s'y rapportant offrent une appréciation moins biaisée de leur influence sur le revenu. Tout particulièrement, elle estime qu'il est possible d'interpréter ainsi le revenu « autre », à savoir la totalité du revenu ne provenant pas du marché du travail, moins les transferts gouvernementaux. Sa définition du revenu autre se rapproche de l'assortiment que nous avons qualifié de « revenu de biens », allocations

familiales et revenu autre. (La liste comprend l'allocation familiale car, malgré qu'il s'agisse d'un transfert gouvernemental, le programme était universel et n'avait pas de rapport avec des caractéristiques particulières non observées comme peuvent en avoir la soutien du revenu ou l'a.-c.). Pour tout dire, nos résultats révèlent que le revenu de biens et le revenu autre sont assortis des corrélations les plus faibles avec les variables dépendantes. Cela porte à croire, si Mayer a raison et si l'usage que nous faisons des effets du premier dollar ne tient pas compte tant l'effet des caractéristiques non observées, que l'influence des gains et du revenu d'un travail autonome sur les gains du fils est exagérée dans la régression des moindres carrés par un facteur de deux ou trois<sup>12</sup>. Qui plus est, si nous mettons l'écart entre les coefficients des fils et ceux des filles sur le compte de l'influence exercée par les modèles de comportement (caractéristiques importantes non observables), alors il est probable que la relation père-fille débouche sur des estimations moins biaisées. Ces arguments donneraient à entendre que l'estimation la plus précise de l'influence du revenu du parent sur les réalisations de l'enfant se chiffre par une hausse de 30 \$ à 50 \$ du revenu de l'enfant par tranche de 1 000 \$ d'augmentation du revenu du père.

Fait à remarquer, toutefois, nos résultats sont susceptibles d'être biaisés dans le sens contraire (c'est-à-dire qu'ils peuvent constituer une sous-estimation), du fait que nous mesurons le revenu du parent d'une année donnée plutôt que la moyenne de plusieurs années. Les variations ponctuelles du revenu font que les mesures limitées à une année constitueraient plus vraisemblablement des mesures imparfaites du revenu permanent et sous-estimeraient probablement pour cette raison la corrélation entre le revenu du parent et celui de l'enfant. Notre décision de n'utiliser que des données se rapportant à 1982 a été motivée par le fait qu'il s'agit de la première année pour laquelle certaines caractéristiques familiales étaient connues. Notamment, il n'existe pas de données sur le nombre des frères et sœurs antérieures à 1982, et l'absence de cette variable (comme l'illustre le tableau 5.5) imprime un biais grave au coefficient du revenu sous forme d'allocation familiale. Afin d'apprécier l'ampleur du biais causé par les erreurs de mesure de cette nature, nous avons réestimé nos modèles sur la base des moyennes du revenu du père et de ses composantes entre 1978 et 1982<sup>12</sup>. Les coefficients des gains et du revenu d'un travail autonome concernant les fils

Tableau 5.5  
Spécification du modèle et sensibilité du rapport  
entre le revenu du père et celui de l'enfant

	[1]	[2]	[3]	[4]	[5]
--	-----	-----	-----	-----	-----

Fils	Effets des dollars supplémentaires (par tranche de 1 000 \$)				
Gains	103,5	101,3	95,9	95,0	90,7
Revenu d'un travail autonome	93,3	92,7	85,3	85,6	76,2
Revenu de biens	30,4	30,9	31,1	29,5	27,7
Assurance-chômage	-372,3	-351,1	-298,9	-287,8	-9,7
Allocation familiale	-367	-90,8	-126,0	335,6	457,3
Revenu autre	74,7	74,0	67,1	66,4	54,1
Revenu des autres membres	91,5	89,1	86,2	91,6	89,4
R <sup>2</sup> corrigé	0,0330	0,0368	0,0385	0,0389	0,0418
Filles	Effets des dollars supplémentaires (par tranche de 1 000 \$)				
Gains	55,0	55,0	49,6	49,0	47,2
Revenu d'un travail autonome	69,5	69,1	64,0	64,2	49,7
Revenu de biens	31,5	31,3	31,4	30,1	28,0
Assurance-chômage	-301,2	-298,6	-217,6	-211,0	-22,8
Allocation familiale	-214,2	-31,9	11,5	581,0	336,2
Revenu autre	69,5	71,6	64,7	64,5	55,3
Revenu des autres membres	79,1	79,7	75,3	82,3	81,5
R <sup>2</sup> corrigé	0,0377	0,0422	0,0471	0,0478	0,0530

Autres variables comprises dans le modèle

Effets du premier dollar	non	non	non	non	oui
Âge et âge au carré	oui	oui	oui	oui	oui
Province de résidence	non	oui	oui	oui	oui
Caractéristiques du quartier	non	non	oui	oui	oui
Structure familiale	non	non	non	oui	oui

**Nota :** Les données du tableau correspondent au coefficient de régression des moindres carrés fondé sur le revenu des fils et des filles (en dollars constants de 1986) à titre de variable dépendante. Les résultats de la colonne [5] proviennent des tableaux 5.3 et 5.4.  
**Le caractère gras** indique la signification statistique à 0,05; et **le caractère gras et l'ombrage** indiquent la signification statistique à 0,01. Les erreurs-types sous-jacentes ont été dérivées de l'estimateur matriciel de la covariance convergente hétéroscédastique de White.

Jourdelement et négativement sur les revenus que les enfants tirent du marché : chaque tranche de 1 000 \$ de prestations étant associée d'une diminution de plus de 200 \$ et de près de 300 \$ du revenu à l'âge adulte de l'enfant. Par contraste, l'effet du revenu de l'a.-c. ne diffère pas statistiquement de néant lorsque le modèle prend en compte les effets du premier dollar. La variable de l'allocation familiale n'est pas statistiquement significative, pour la plupart, par rapport à néant, mais elle est numériquement importante et évolue de façon marquée après neutralisation de la province de résidence et du nombre de frères et

soeurs. Une fois ces contrôles ajoutés, l'effet du premier dollar porte à la hausse le coefficient de l'allocation familiale pour les fils (sans pour autant qu'il devienne statistiquement significatif) et le diminue pour les filles.

Comment faut-il interpréter l'influence du premier dollar? Il est difficile de voir à l'œuvre dans ces tendances un mécanisme causal. Si chaque source de revenu est capable de signaler l'effet de caractéristiques non observées du père qui est transmis à l'enfant, il reste à les cerner et à en découvrir le mode de fonctionnement.



personnes considérées comme vivant en union libre dans nos données constituent en fait un groupe résiduel. Il s'agit des particuliers qui n'avaient offert aucun renseignement sur leur état matrimonial sur la déclaration de revenus mais dont on sait, d'après les résultats du traitement par Statistique Canada des données du formulaire T1, qu'ils habitaient à la même adresse qu'une femme ayant des enfants<sup>8</sup>. À notre avis, il est possible que ces particuliers soient devenus membres de familles monoparentales à un certain moment après la naissance de l'enfant et, pour cette raison, l'estimation rend compte de l'influence de perturbations familiales ayant eu lieu plus tôt dans la vie de l'enfant. Cette façon de voir fait que l'effet est moins révélateur de l'incidence de l'union libre que de la perturbation familiale et de l'état de mère chef de famille. Reste à savoir quelle est l'interprétation exacte de cette variable. Notamment, nous voulons éviter d'y voir l'effet de l'« union libre », ce malgré le choix de cette dénomination.

#### 4. Les questions d'interprétation

Deux thèmes reviennent sans cesse dans les études empiriques portant sur les réalisations des enfants, nommément l'influence des facteurs non observés et la difficulté à cerner des tendances causales. Haveman et Wolfe (1995), entre autres, proposent un examen approfondi des écrits américains, au terme duquel ils insistent sur ces mêmes questions, lesquelles concernent le biais des variables omises et des facteurs endogènes. Par conséquent, nous devrions, dans l'interprétation de nos constatations, nous demander quelles variables sont exclues de nos modèles de régression et quelles sont celles qui y entrent.

L'influence de l'effet du « premier dollar » met en lumière l'importance des facteurs omis. Dans leur ensemble, ces variables sont des ajouts très importants aux modèles de régression dont traitent les tableaux 5.3 et 5.4. Non seulement sont-elles statistiquement significatives, mais elles sont également numériquement importantes<sup>9</sup>. Qui plus est, ces variables jouent un rôle important dans l'évaluation de l'ampleur et le répérage de certains coefficients liés aux effets des dollars supplémentaires. En effet, les estimations de coefficients du revenu des parents seront entachées d'un biais à la hausse s'il existe d'autres influences déterminantes des résultats obtenus de l'enfant en rapport positif avec le revenu et qui auraient été écartées du modèle.

Nous nous distinguons de Hill et Duncan (1987), en ce sens que, à notre avis, la provenance du revenu des parents de sources différentes influe différemment les résultats obtenus à l'âge adulte par les enfants. Pour illustrer cette affirmation, nous pouvons infirmer la restriction voulant que le même coefficient soit attribué aux six sources de revenu du père<sup>10</sup>. Cela porte à croire que l'argent n'est pas seul à déterminer le revenu gagné à l'âge adulte des enfants, et on pourrait y lire l'importance éventuelle des modes de comportement offerts par les parents.

À noter, toutefois, que la conclusion demeure valable si les estimations sont non biaisées. Le tableau 5.5 illustre le potentiel d'intervention d'un biais attribuable à l'omission d'une variable. Il dénombre les coefficients d'estimation fondés sur les diverses sources de revenu pour un éventail de spécifications de modèle. La dernière colonne présente les résultats des moindres carrés provenant des tableaux 5.3 et 5.4. La colonne [1] illustre le modèle le plus simple, celui dont les seules variables explicatives, outre le montant de revenu provenant des sept sources possibles (les six sources du père et le revenu des autres membres du ménage), sont l'âge et l'âge au carré du père et de l'enfant. Les autres colonnes donnent les résultats de modèles plus étendus qui prennent en compte successivement des contrôles au titre de la province de résidence, des caractéristiques du quartier (y compris le nombre de déménagements et la langue de la majorité) et, en dernier lieu, de la structure familiale. Ainsi, la colonne [4] comprend toutes les variables explicatives sauf l'effet du premier dollar.

Il est utile de se pencher sur les coefficients des sources de revenu autres que les transferts gouvernementaux, à savoir les gains, le revenu d'un travail autonome, le revenu de biens, le revenu autre et le revenu des autres membres du ménage. Si les modèles simples représentés aux colonnes [1] à [4] surestiment l'ampleur des coefficients en comparaison de la colonne [5], et si l'effet du premier dollar joue un rôle important à cet égard (notamment en ce qui concerne le revenu d'un travail autonome et le revenu autre), les résultats sont néanmoins robustes. La totalité des coefficients de la colonne [5] se situe à une erreur-type de ceux de la colonne [1]. Pour tout dire, l'incidence principale de la spécification du modèle se rapporte au rôle de l'assurance-chômage, principale source de revenu autre que le marché. À défaut de neutraliser l'effet du premier dollar, le volume des prestations de l'a.-c. touchées par les pères se répercute



parent prestataire de l'a.-c. et le revenu de l'enfant à l'âge d'adulte.

En règle générale, le revenu que le père a tiré du marché influence positivement le revenu de l'enfant. L'ampleur de l'influence est à peu près comparable pour toutes les catégories de revenu. Les coefficients correspondant au montant des gains, au revenu d'un travail autonome et au revenu de biens sont situés à deux erreurs-types l'un de l'autre. (Néanmoins, celui du revenu des biens est le plus modeste des trois.) Par contraste, le montant du revenu de l'a.-c. (que l'on pourrait apparenter à un indicateur de la gravité du chômage, comme il se rapporte à la durée des séjours au chômage) n'influence pas, en moyenne, le revenu de l'enfant à l'âge adulte. Cela dit, les coefficients des fils sont invariablement plus importants que ceux des filles, celui de gains s'appliquant aux fils étant environ deux fois la donnée correspondante intéressant ces dernières. L'influence exercée par le revenu de biens et le revenu autre fait exception à cette règle, car elle est pratiquement identique pour les deux sexes.

Quant aux variables concernant le quartier, il existe indéniablement un rapport poussé et négatif entre le nombre de déménagements et le revenu de l'enfant : un seul déménagement se traduit par une diminution de quelque 540 \$ du revenu tant des fils que des filles, la donnée correspondante étant d'environ 2 100 \$ si trois déménagements ont eu lieu. La valeur absolue des résultats au 50<sup>e</sup> percentile est accrue dans tous les cas, ce qui porte à croire que les effets moyens découlant des moindres carrés sont probablement inférieurs à la réalité. Le revenu médian du quartier est un corrélat positif du revenu des fils, chaque tranche de 1 000 \$ en plus étant associée à une hausse de quelque 370 \$ de leur revenu gagné futur. Cela donne à entendre qu'une progression d'un écart-type de cette valeur (2 852 \$) se traduirait par une hausse de 1 050 \$ du revenu du fils à l'âge adulte. Par contre, le revenu médian du quartier, bien qu'il soit élevé et statistiquement significatif, n'est pas étroitement lié, en moyenne, au revenu de la fille. Cette situation camoufle, toutefois, une corrélation positive accentuée au 90<sup>e</sup> percentile. La part des travailleurs autonomes et des prestataires de l'a.-c. influence le revenu tant des fils que des filles, mais de manières différentes. Chaque unité d'augmentation des variables concernées est liée à une diminution moyenne d'environ 90 \$ et 150 \$ respectivement du revenu des filles, mais elle est associée à une hausse du revenu des fils de quelque 120 \$ et 35 \$.

La structure familiale est un corrélat de poids du revenu à l'âge adulte tant des hommes que des femmes. Premièrement, le fait que la mère ait travaillé ou non n'exerce pas d'incidence statistiquement significative sur le revenu à l'âge adulte des adolescents. Fait à signaler, ces moyennes camouflent une influence positive chez l'homme au 90<sup>e</sup> percentile que vient contrebalancer une influence négative au 10<sup>e</sup>, tandis que, chez la femme, une influence positive se conspécue aux deux percentiles précités en présence d'une mère déclarante (bien que la médiane ne diffère pas statistiquement de zéro). Par la même occasion, il faut souligner que le revenu des autres membres du ménage, qui équivaut dans la grande majorité des cas au revenu de la mère, est en rapport positif avec le revenu à l'âge adulte des enfants. L'effet, qui se chiffre aux environs de 82 \$ à 90 \$ par tranche de 1 000 \$ gagnés, est à peu près identique tant pour les fils que pour les filles. Ajoutons que cette valeur est supérieure de plus de 70 % au coefficient traduisant le rapport entre les gains des pères et ceux des filles : en clair, la corrélation entre les résultats obtenus par les filles et le revenu que leur mère et leurs frères et sœurs ont tiré du marché du travail semble plus forte que celle qui existe entre ces résultats et le revenu de même source des pères.

Deuxièmement, le nombre d'enfants que compte un ménage au même moment est en rapport négatif avec les résultats obtenus à l'âge adulte : pour chaque frère et sœur habitant toujours à la maison, le revenu à l'âge adulte des particuliers échantillonnés subit une baisse d'environ 300 \$ à 400 \$.

Troisièmement, les enfants élevés par un père seul ou vivant en union libre touchaient, à l'âge adulte, des revenus de loin inférieurs à ceux d'enfants dont le père était marié : chez le fils, la présence de l'union libre occasionne un effet négatif probable de -1 500 \$, tandis que la marge est légèrement moindre chez les filles (du moins à la médiane). L'ampleur de ces effets est trapéante, si l'on songe que moins d'un pour cent de l'échantillon entre dans cette catégorie. À remarquer que le déclarant invité à préciser son état matrimonial sur le formulaire T1 de 1982 ne pouvait choisir de catégorie distincte correspondant à l'union libre. Nous avons tendance à croire que, premièrement, certains particuliers vivant en union libre et élevant une famille ont probablement déclaré qu'ils étaient mariés, bien que seuls les personnes mariées devant la loi qui demandaient des exemptions d'impôt aient été autorisées à se déclarer tels. Deuxièmement, les

Tableau 5.4 – fin  
Résultats de la régression multidimensionnelle : filles

Moindres carrés		Régression de quantiles	
		90 <sup>e</sup> percentile	moins le 10 <sup>e</sup>
Célibataire	-54,1 (306,8) -1 213,0 30,1 -474,5 -504,5	(25,2) (487,9) (73,4) -22,6 (510,8) -275,8	(429,8) (487,9) (510,8) -253,1 (589,5) -275,8
Union libre	(416,1) -915,4 (328,4) -1 361,2 (549,9) -1 361,2	(25,2) (487,9) (73,4) -22,6 (510,8) -253,1	(429,8) (487,9) (510,8) -253,1 (589,5) -275,8
Constante	16 583,4 (733,4) 20 505,0 (1 078,8) -30,6 (112,7)	(1 078,8) (112,7) -30,6 (112,7) (1 163,0) (1 163,0)	(960,5) (960,5) 29 804,4 (960,5) 29 773,8 (1 163,0)
Nombre d'observations	126 773	126 773	126 773
R <sup>2</sup>	0,0533	0,0275	0,0034
	126 773	126 773	0,0526

**Nota :** La variable dépendante est le revenu total du marché de l'enfant pour 1994. Les variables indépendantes se rapportent à 1982. Toutes les mesures de revenu sont en dollars constants de 1986 et sont corrigées de l'inflation au moyen de l'IPC. Le revenu du père, le revenu médian du quartier et l'écart-type des revenus du quartier sont en milliers de dollars. Tous les modèles comprennent des contrôles au titre de la province de résidence, de l'âge et de l'âge au carré tant du père que de l'enfant. Les parenthèses ( ) désignent l'erreur-type. Le caractère gras indique une signification à 0,05; le caractère gras et l'ombrage indiquent une signification à 0,01. Les erreurs-types des résultats des moindres carrés sont robustes jusqu'à l'hétéroscédasticité. Les erreurs-types des régressions de quantiles proviennent de la méthode « bootstrap », pour laquelle 20 répétitions ont été effectuées.

minimisation des écarts absolus à la médiane, elles réagissent moins que les moindres carrés aux valeurs aberrantes. Les tableaux 5.3 et 5.4 offrent les résultats de l'estimation des moindres carrés, de la régression des quantiles à la médiane, mais également ceux de la régression des quantiles au 10<sup>e</sup> et au 90<sup>e</sup> déciles de la variable dépendante. Cette dernière régression permet également de contrôler les résultats moyens ou médians en indiquant le degré de sensibilité de particuliers situés aux deux extrémités de l'échelle de revenus à l'influence d'une variable particulière. (Certains résultats aux graphiques 5.2 et 5.3 suggèrent cette possibilité.) Envisagée globalement, elle permet également d'apprécier en quelle sorte l'influence d'une variable est traduite par une estimation de l'écart entre les 90<sup>e</sup> et 10<sup>e</sup> déciles à la dernière colonne des tableaux 5.3 et 5.4.

Les coefficients dans les tableaux correspondront à la variation monétaire du revenu des fils ou des filles par rapport à la variation d'une unité de la variable indépendante. Les valeurs en caractères gras correspondent à un degré de signification marginal d'au plus 0,05, tandis que les valeurs en caractères gras sur fond ombré ont un niveau d'au plus 0,01<sup>e</sup>. Les effets du premier dollar sont importants et statistiquement significatifs, pratiquement sans exception. Comme le laissait entendre l'analyse présentée à la section précédente, l'effet du premier dollar de revenu de biens est frappant, se chiffrant en moyenne à plus de 3 000 \$ chez les hommes et à près de 2 700 \$ chez les femmes. (Les estimations à la médiane sont inférieures à ces chiffres.) Aucun écart d'importance n'est à signaler entre les estimations de coefficients aux 10<sup>e</sup> et 90<sup>e</sup> percentiles chez les hommes, situation qui porte à croire que l'effet se manifeste dans l'échelle de revenus au complet et qu'il ne s'agit pas d'un effet important lié à quelques sujets seulement. (Comme le montrent les tableaux 5.1 et 5A.1 et 5A.2 figurant en annexe, environ 75 % des individus échantillonnés déclaraient un revenu de biens autre que néant. La part est si grande car même les intérêts de comptes bancaires en période d'inflation peuvent être à ce point importants qu'ils doivent être déclarés.) L'enfant profite également de la présence d'un père qui a déclaré un revenu d'un travail autonome, mais cela n'est vrai que pour les particuliers, du moins les fils, destinés au sommet de la répartition des revenus. (Quant aux filles, il existe également une relation positive à la médiane.) Le contraire est vrai si le père a déclaré des gains : en pareil cas, les individus au 90<sup>e</sup> percentile sont défavorisés. En dernier lieu, il existe une association négative entre l'état de

Tableau 5.4  
Résultats de la régression multidimensionnelle : filles

Moindres carrés				Régression de quantiles			
				50 <sup>e</sup> percentile	10 <sup>e</sup> percentile	90 <sup>e</sup> percentile	le 10 <sup>e</sup> moins
Effets du premier dollar							
Gains	-137,4	(420,9)	(250,2)	-67,2	-20,3	-1 757,2	-1 736,9
Revenu d'un travail autonome	850,0	337,2	61,0	(36,2)	(338,7)	1 642,3	1 581,3
Revenu de biens	2 668,0	(126,6)	(34,7)	152,5	(271,0)	2 376,0	2 376,0
Assurance-chômage	-865,4	(113,6)	(21,1)	-30,2	(183,8)	-1 112,7	-1 082,5
Allocation familiale	507,9	(175,7)	(212,9)	63,5	(167,9)	568,8	505,4
Revenu autre	195,2	(149,4)	(150,9)	205,0	(214,8)	-68,8	-107,7
Effets des dollars supplémentaires (tranche de 1 000 \$)	(120,9)	(143,5)	(22,3)	(176,0)	(151,1)		
Effets du quartier							
Gains	47,2	52,2	(1,4)	7,9	137,1	129,2	
Revenu d'un travail autonome	49,7	52,7	(5,3)	13,0	87,0	73,9	
Revenu de biens	28,0	18,8	(3,2)	7,3	173,4	166,1	
Assurance-chômage	-22,8	-64,3	(3,5)	14,3	197,6	183,3	
Allocation familiale	336,2	-126,3	(5,6)	-0,3	417,3	417,6	
Revenu autre	55,3	26,3	(21,4)	9,6	104,3	94,7	
Effets du quartier	(17,1)	(13,2)	(4,6)	(26,7)	(23,4)		
Revenu médian (en milliers de dollars)							
Écart-type	12,7	7,0	2,3	9,0	(41,7)	6,7	
Part de travailleurs autonomes	(2,6)	(1,7)	(1,3)	(2,7)	(2,5)		
Part de prestataires de l'a.-c.	-151,7	-204,9	(2,3)	-6,1	-130,0	-123,9	
Un déménagement	-553,5	-686,7	(13,5)	-59,3	-411,3	-352,0	
Deux déménagements	-1 282,3	-1 957,9	(116,6)	-109,4	-975,5	-866,2	
Trois déménagements	-1 818,8	-2 328,7	(239,0)	-84,7	-1 555,0	-1 470,3	
Caractéristiques particulières	(433,7)	(662,5)	(34,9)	(848,6)	(637,9)		
Langue de la majorité							
Nombre d'enfants	-353,0	-278,4	(47,2)	-42,2	-433,9	-391,7	
Revenu des autres membres	81,5	58,4	(9,2)	10,9	95,4	84,5	
Marie, conjointe occupée	233,6	292,5	(1,4)	43,6	581,4	537,8	
Effets du premier dollar	(201,2)	(159,8)	(16,2)	(250,0)	(218,3)		



Tableau 5.3 – fils  
Résultats de la régression multidimensionnelle : fils

Moindres carrés		Régression de quantiles	
		90 <sup>e</sup>	moins le 10 <sup>e</sup>
<hr/>			
Célibataire	-1 600,0	-1 646,9	-1 536,5
Union libre	-2 245,5	-1 560,4	-1 532,0
Constante	12 915,3	-2 423,0	30 001,9
	(1 045,1)	(719,2)	(1 663,0)
	(630,3)	(413,9)	(842,8)
Nombre d'observations	158 561	158 561	158 561
R <sup>2</sup> corrigé	0,0421	0,0284	0,0546
<hr/>			

**Nota :** La variable dépendante est le revenu total du marché de l'enfant pour 1994. Les variables indépendantes se rapportent à 1982. Toutes les mesures de revenu sont en dollars constants de 1986 et sont corrigées de l'inflation au moyen de l'IPC. Le revenu du père, le revenu médian du quartier et l'écart-type des revenus du quartier sont en milliers de dollars. Tous les modèles comprennent des contrôles au titre de la province de résidence, de l'âge et de l'âge au carré tant du père que de l'enfant. Les parenthèses ( ) désignent l'erreur-type. Le caractère gras indique une signification à 0,05; le caractère gras et l'ombrage indiquent une signification à 0,01. Les erreurs-types des résultats des moindres carrés sont robustes jusqu'à l'hétéroscédasticité. Les erreurs-types des régressions de quantiles proviennent de la méthode « bootstrap », pour laquelle 20 répétitions ont été effectuées.

médian du quartier habité par l'enfant. Nous estimons qu'un « quartier à faible revenu » est celui dont le revenu médian est compris au quartile le plus bas de tous les quartiers, tandis qu'une définition comparable (fondée sur le quartile le plus élevé) s'applique aux « quartiers à revenu élevé ». De façon générale, les individus issus de quartiers à faible revenu ont beaucoup moins de chances que les autres de passer à la moitié supérieure de l'échelle de revenus et ont le plus de chances de demeurer au décile le plus bas. Cet énoncé s'avère particulièrement dans le cas des fils. Le deuxième volet fait la distinction entre les quartiers dont la part de bénéficiaires de l'a.-c. en regard du nombre total de déclarants est supérieure ou inférieure à la moyenne canadienne. Les fils de pères situés au décile le plus bas habitant un quartier qui compte une part de bénéficiaires de l'a.-c. supérieure à la moyenne ont plus de chances que les autres de demeurer dans la moitié inférieure de leur cohorte, bien que les différences ne soient pas prononcées (ni même apparentes au décile le plus bas). En revanche, les filles habitant les mêmes quartiers ont moins de chances que leurs semblables d'échapper au décile le plus bas, beaucoup moins de chances d'accéder au décile le plus élevé et, en général, moins de chances de dépasser le cinquième décile. Il en est ainsi également de l'influence exercée par le déménagement du père entre 1978 et 1982. Si les fils

### 3. Les résultats de la régression

dont le père avait déménagé ont plus de chances que les autres d'être confinés au décile le plus bas (16,6 % contre 13,7 %), aucune différence marquée n'est à signaler entre les deux groupes aux autres points de l'échelle. L'effet négatif du déménagement se dégage un peu plus nettement cependant en ce qui concerne les filles.

Le tableau 5.3 dénombre les résultats de la régression multidimensionnelle intéressant les fils, tandis que le tableau 5.4 offre les données correspondantes se rapportant aux filles. Étant donné que certains individus ont des revenus très élevés, nous nous inquiétons de la sensibilité des moindres carrés aux valeurs aberrantes. Nous avons pris deux mesures pour parer à ce risque. Dans un premier temps, comme le décrit l'annexe, nous supprimons les observations de taille la ou certaines composantes du revenu ont de très importantes valeurs négatives. Dans bien des cas, d'importantes valeurs positives d'autres composantes faisaient contrepoids aux valeurs négatives, situation qui donne à entendre que des facteurs fiscaux ont influencé le mode de déclaration du revenu. Deuxièmement, nous avons procédé également à une analyse de régression des quantiles au 50<sup>e</sup> percentile. Étant donné que ces régressions sont fondées sur la

**Tableau 5.3**  
**Résultats de la régression multidimensionnelle : fils**

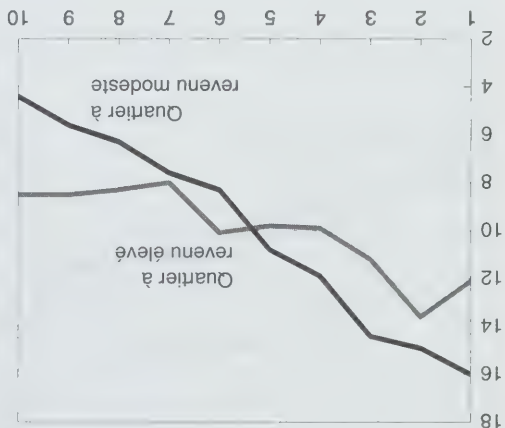
	Moindres carrés			Régression de quantiles		
	50 <sup>e</sup> percentile	10 <sup>e</sup> percentile	90 <sup>e</sup> percentile	50 <sup>e</sup> percentile	10 <sup>e</sup> percentile	90 <sup>e</sup> percentile
<b>Effets du premier dollar</b>						
Gains	1 003,5	557,1	514,0	-1 891,4	-2 405,4	(402,5)
Revenu d'un travail autonome	(657,4)	(187,3)	(185,3)	(478,2)	2 320,7	(359,9)
Revenu de biens	(295,4)	(164,8)	(221,7)	(360,5)	2 066,0	(190,8)
Assurance-chômage	(177,3)	(94,8)	(107,6)	(150,4)	-177,1	(186,2)
Allocation familiale	(233,6)	(187,3)	(156,4)	(317,4)	-663,6	(313,7)
Revenu autre	(225,5)	(116,1)	(136,2)	(254,2)	571,8	(215,0)
	(169,6)	(106,0)	(127,3)	(190,4)	(212,6)	
<b>Effets des dollars supplémentaires (tranche de 1 000 \$)</b>						
Gains	90,7	86,6	23,3	217,0	193,7	(10,2)
Revenu d'un travail autonome	(22,1)	(3,8)	(8,9)	(8,9)	137,0	(21,5)
Revenu de biens	27,7	35,3	4,5	273,0	268,5	(16,2)
Assurance-chômage	(12,8)	(7,6)	(5,4)	(23,5)	347,5	(78,4)
Allocation familiale	(58,3)	(44,7)	(38,0)	(51,0)	845,4	495,8
Revenu autre	(315,0)	(176,2)	(138,0)	(295,3)	134,5	(305,5)
	54,1	40,2	-3,9	130,5	(15,1)	
<b>Effets du quartier</b>						
Revenu médian (en milliers de dollars)	367,8	366,8	175,5	416,4	240,9	(46,8)
Écart-type	(41,2)	(25,3)	(32,0)	(50,4)	14,8	(4,6)
Part de travailleurs autonomes	(5,7)	(2,7)	(2,1)	(3,5)	97,3	(34,9)
Part de prestataires de l'a.-c.	35,2	67,6	66,9	47,2	-19,7	(22,2)
Un déménagement	(15,2)	(10,0)	(12,2)	(18,2)	-434,7	432,4
Deux déménagements	(197,8)	(139,5)	(135,5)	(159,7)	1 516,8	(224,8)
Trois déménagements	-2 134,3	-2 281,5	-1 475,9	-384,3	1 091,7	(443,0)
Caractéristiques particulières	(583,9)	(286,4)	(406,6)	(691,3)	(738,2)	
Langue de la majorité	-593,0	711,1	556,2	-1 014,0	-1 570,2	(519,2)
Nombre d'enfants	(415,7)	(232,1)	(255,5)	(415,9)	-256,3	(96,5)
Revenu des autres membres	(127,8)	(69,8)	(39,5)	(111,9)	79,8	(10,6)
Marié, conjointe occupée	(14,0)	(3,7)	(4,4)	(11,4)	1 028,6	(343,6)
	(372,6)	(129,2)	(122,1)	(276,7)		

Graphique 5.3  
Caractéristiques du quartier et résultats obtenus par l'enfant  
(pères situés au décile le plus bas)

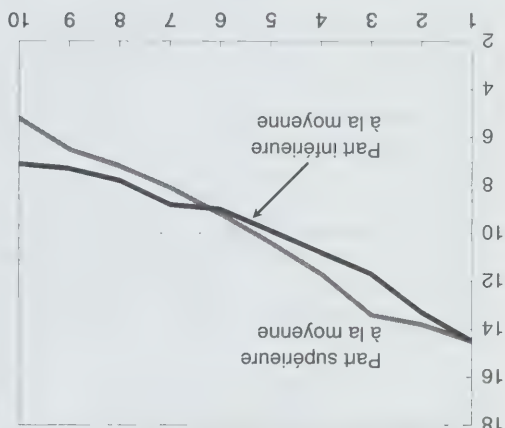
Filles

Fils

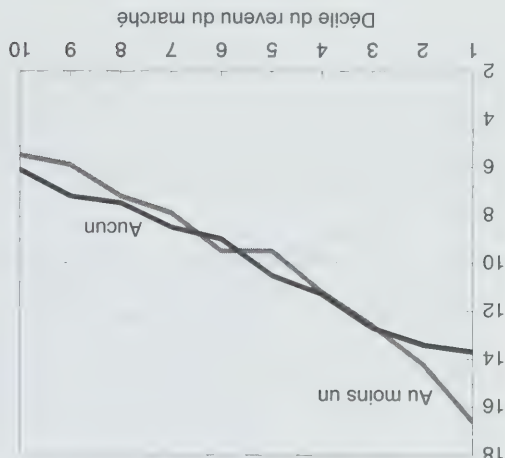
A. Revenu du quartier



B. Part des prestataires de l'a.c.



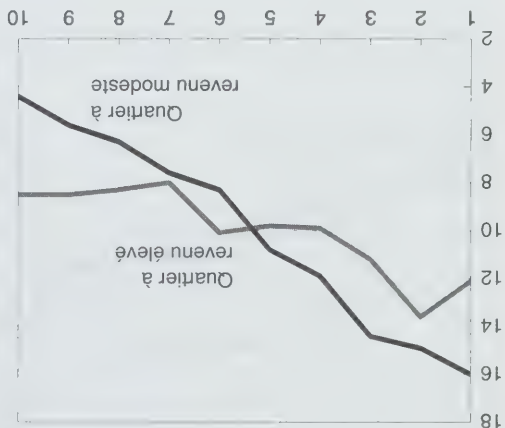
C. Nombre de déménagements du père



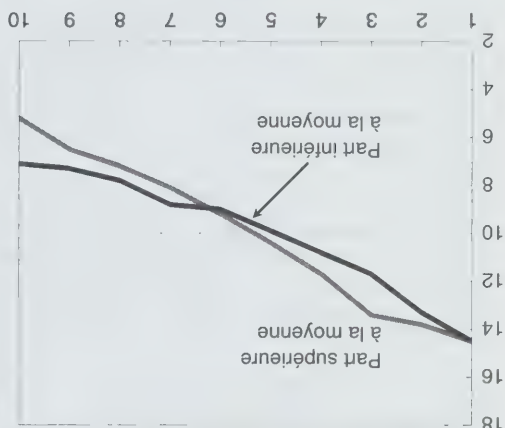
Filles

Fils

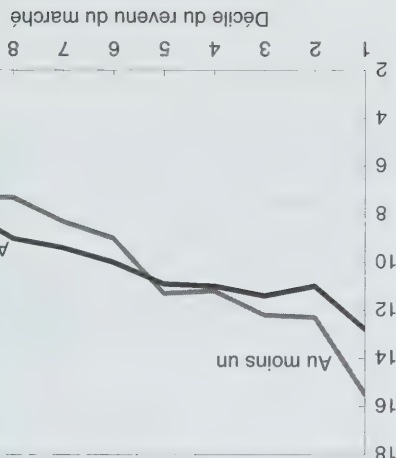
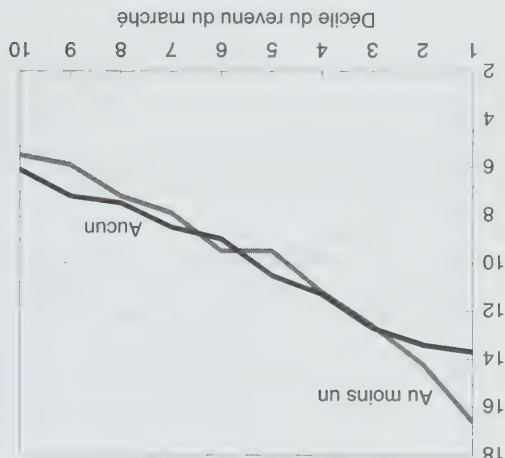
A. Revenu du quartier



B. Part des prestataires de l'a.c.



C. Nombre de déménagements du père

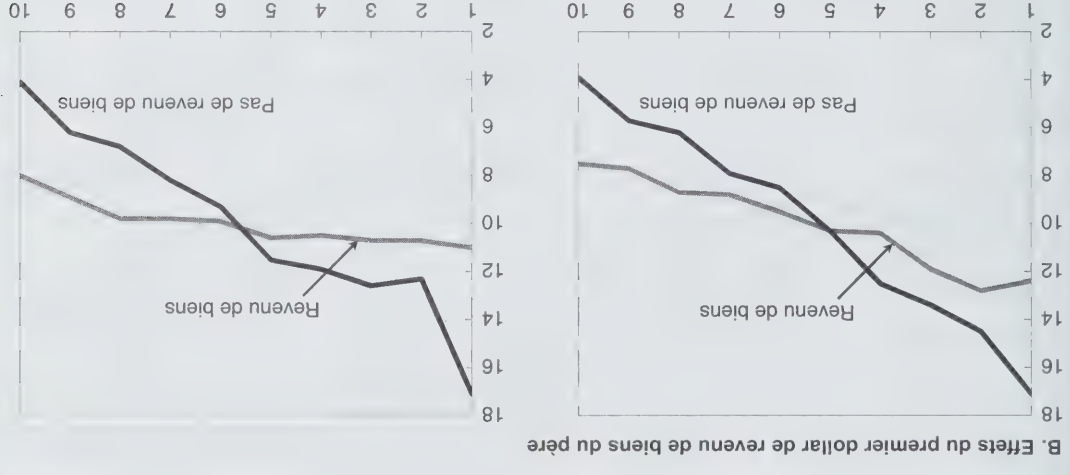
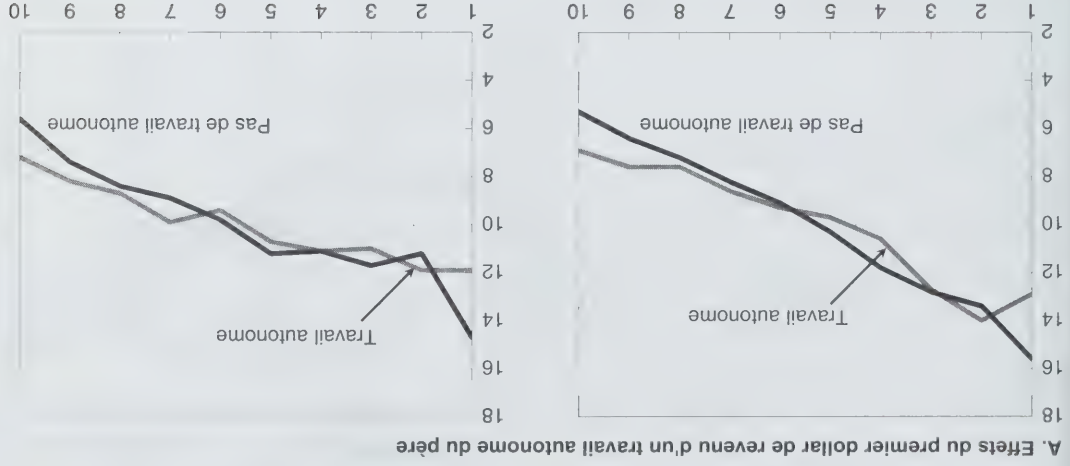




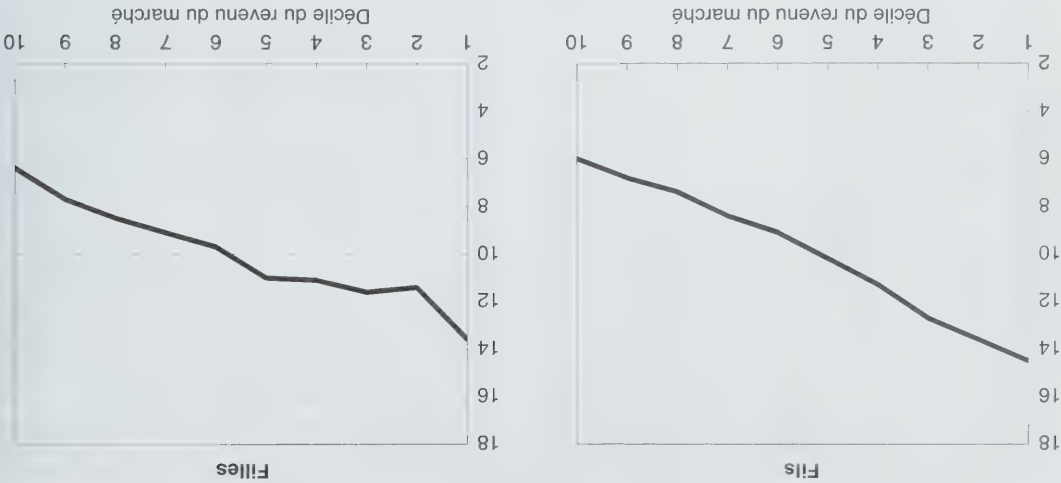
Graphique 5.2  
Composition du revenu du père et résultats obtenus par l'enfant  
(pères situés au décile le plus bas)

Filles

Fils



Graphique 5.1  
Résultats relatifs obtenus par les enfants de pères situés  
au décile le plus bas



d'autres termes, lorsque conjugués aux données de la graphique 5.1, les chiffres (portant sur les enfants de pères au revenu modeste) nous procurent une description de la relation entre ce que nous avons convenu d'appeler les « effets du premier dollar » des composantes du revenu et la situation relative des enfants dans l'échelle des revenus. À nouveau, c'est le rôle du revenu de biens qui se démarque le plus. Les individus dont le père n'avait pas déclaré de revenu de biens (ni positif ni négatif) avaient beaucoup plus de chances que les autres membres de leur cohorte (à l'âge adulte) de se retrouver au décile le plus bas et beaucoup moins de chances de se situer au décile le plus élevé. La probabilité qu'avait ces fils de se situer au décile le plus bas était de 17,1 %, à comparer à 12,4 % pour ceux dont le père avait déclaré un revenu de biens. L'écart est légèrement plus grand en ce qui concerne les filles (17,1 % contre 11,1 %). En effet, les filles dont le père avait déclaré un revenu de biens avaient à peu près tout autant de chances de se classer à n'importe quel décile de l'échelle de revenus (exception faite, éventuellement, des deux plus élevés).

Le graphique 5.3 présente un classement selon les caractéristiques du quartier. Le premier volet fait le triage des individus dont le père se situait au décile le plus bas, selon le revenu

(L'annexe reproduit les matrices intégrales se rapportant tant aux fils qu'aux filles.)

En l'absence de tout rapport entre le revenu du père et celui de l'enfant, les chances de se situer dans un décile donné seraient uniformes, soit 10 %. Des écarts statistiquement significatifs par rapport à 10 % révéleraient une mobilité intergénérationnelle imparfaite du revenu. Le graphique 5.1 nous apprend que 14,5 % des fils de père classé au décile inférieur avaient un revenu situé au même décile (à l'âge adulte) de leur cohorte. La donnée correspondante pour les filles est de 13,6 %. En règle générale, les fils élevés par des pères au revenu modeste ont moins de chances que les autres de se situer dans la moitié supérieure de l'échelle des revenus, plus de chances de rester dans la moitié inférieure et beaucoup plus de chances d'occuper le même rang que leur père. Quant aux filles, elles ont également beaucoup plus de chances de se situer dans la partie inférieure de l'échelle de répartition des revenus, elles ont nettement moins de chances d'atteindre les 20 % supérieurs, et elles ont tout autant de chances de se retrouver à n'importe quel autre échelon.

Le graphique 5.2 offre des renseignements semblables d'après la composition du revenu du père, à savoir selon qu'il a déclaré un revenu d'un travail autonome, de biens ou de l'a.-c. En

Tableau 5.2  
Corrélations entre les variables de revenu des parents, de quartier et de structure familiale et le revenu du marché des fils et des filles

Filles		Fils		Filles	
Variable	Coefficient	Variable	Coefficient	Variable	Coefficient
Effets des dollars supplémentaires (par tranche de 1 000 \$)					
Gains					
Revenu d'un travail autonome	0,00	116	0,00	62	0,00
Revenu de biens	0,00	82	0,00	66	0,00
Assurance-chômage	0,00	-830	0,00	58	0,00
Allocation familiale	-1 233	0,00	-929	-568	0,00
Revenu autre	112	0,00	104	0,00	0,00
Effets du quartier					
Revenu médian (milliers de dollars)	459	0,00	475	0,00	0,00
Écart-type	52	0,00	43	0,00	0,00
Part des travailleurs autonomes	-256	0,00	-251	0,00	0,00
Part des prestataires de l'a.-c.	332	0,00	146	0,00	0,00
Caractéristiques du particulier et de la famille					
Revenu des autres membres	138	0,00	115	0,00	0,00
Nombre d'enfants	53	0,43	-17	0,65	0,00
Nombre d'observations	158 561		126 773		

Nota : Toutes les régressions ont été effectuées au moyen des moindres carrés, sur la base du revenu du marché (en dollars) des fils ou des filles à titre de variables dépendantes.  
La valeur p désigne le degré de signification marginal d'un test t de l'hypothèse nulle selon laquelle le coefficient est égal à zéro.

en dollars) par rapport à chaque variation de 1 000 \$ de la variable indépendante. Il existe une relation positive entre le revenu des enfants à l'âge adulte et le revenu (gains, revenu d'un travail autonome, revenu de biens) que les pères ont tiré du marché, mais une relation négative entre celui-ci et le revenu de sources autres que le marché (l'a.-c. et l'allocation familiale). Qui plus est, la relation semble être plus étroite pour les fils que pour les filles. Le rapport négatif entre l'importation du revenu sous forme d'allocations familiales et le revenu que l'enfant obtient du marché à l'âge adulte peut sembler curieux. Comme le révèle l'analyse multidimensionnelle à la section suivante, la situation s'explique et fait de la corrélation entre l'allocation familiale et la province de résidence et le nombre d'enfants. Comme le revenu de l'allocation familiale n'est pas mesuré par enfant, les résultats de l'analyse unidimensionnelle mettent en lumière un effet négatif des frères et soeurs. Fait tout aussi intéressant, le revenu de la fille à l'âge adulte est beaucoup plus étroitement lié à celui des autres membres du ménage (surtout celui de la mère, mais également celui des frères et soeurs) qu'il ne l'est au revenu du père. En effet, le revenu moyen de la fille augmente de 62 \$ par tranche de 1 000 \$ d'augmentation du revenu du père, tandis que la progression est pratiquement le

double, 115 \$, par tranche de 1 000 \$ d'augmentation du revenu des autres membres. Cette situation, envisagée à la lueur des résultats décrits au paragraphe précédent (portant sur l'effet d'une mère qui travaille) fait planer la possibilité que s'exercent des effets de démonstration ou de modèle de comportement. En outre, il existe un rapport positif entre le revenu du fils et de la fille et le revenu médian du quartier, l'écart-type du revenu du quartier et la part des travailleurs autonomes que compte ce dernier, tandis qu'un rapport négatif est à signaler vis-à-vis de la part des bénéficiaires de l'a.-c. Exception faite de la part de ceux-ci, tous les coefficients sont sensiblement comparables pour l'homme et pour la femme.

Par ailleurs, il peut être utile d'envisager le rôle de certaines de ces variables en examinant le classement des enfants (à l'âge adulte) dans la répartition des revenus en regard du classement des pères. Dans cette optique, nous nous penchons ci-après sur les matrices de transition qui mettent en rapport le rang décile du père et celui de l'enfant. Étant donné l'inquiétude que suscitent les conséquences à long terme du faible, ceux qui forment le décile le plus bas.



Tableau 5.1  
Caractéristiques contextuelles  
et revenu du marché des fils et des filles

Filles		Fils		Filles		Fils	
Variable	Nombre d'observations	Revenu moyen du marché	Valeur p	Variable	Nombre d'observations	Revenu moyen du marché	Valeur p
Effets du premier dollar				Nombre de déménagements	124 529	26 864	100 589
Pas de gains	15 526	24 860	0,00	Un déménagement	26 260	26 096	20 197
Avec gains	143 035	26 818	0,00	Pas de déménagement	18 101	17 268	15 975
Pas de revenu d'un travail autonome	135 845	26 443	0,00	Au moins trois déménagements	14 427	14 257	0,00
Avec revenu d'un travail autonome	22 716	27 719	0,00	Deux déménagements	17 666	18 257	0,00
Pas de revenu de biens	41 042	22 851	0,00	Langue autre que celle de la majorité	18 411	17 834	0,02
Avec revenu de biens	117 519	27 945	0,00	Langue de la majorité	15 224	15 035	107 035
Pas d'assurance-chômage	133 644	27 217	0,00	Caractéristiques du particulier et de la famille	26 406	26 635	0,51
Avec assurance-chômage	24 917	23 457	0,00	Célibataire	4 757	22 887	3 146
Pas d'allocation familiale	40 392	27 048	0,00	Union libre	1 782	22 488	0,00
Avec allocation familiale	118 169	26 482	0,00				
Pas de revenu autre	108 063	26 329	0,00				
Avec revenu autre	50 498	27 262	0,00				
Nombre de déménagements	124 529	26 864	100 589				
Un déménagement	26 260	26 096	20 197				
Deux déménagements	6 447	24 954	5 011				
Au moins trois déménagements	1 325	22 906	976				
Caractéristiques du particulier et de la famille	5 989	26 406	4 819				
Langue autre que celle de la majorité	152 572	26 635	121 954				
Langue de la majorité	20 005	27 048	15 224				
Marité, conjointe sans emploi	132 017	26 753	107 035				
Marité, conjointe occupée	4 757	22 887	3 146				
Célibataire	1 782	22 488	0,00				
Union libre							

Nota : La valeur p représente le degré de signification marginale d'un test t ou F de l'hypothèse nulle selon laquelle les moyennes sont égales à l'intérieur des groupes.

les filles de familles dont les deux parents avaient produit des déclarations de revenus (c'est-à-dire dont les deux participants activement au marché du travail) gagnaient légèrement plus en moyenne que celles dont seul le père le faisait. (Le score t du test de l'hypothèse nulle que les deux moyennes sont identiques est de 3,4.) Le contraire s'avère pour ce qui est des fils, mais l'écart observé entre les deux moyennes n'est pas statistiquement significatif ( $t = 1,5$ ).

Le tableau 5.2 présente les résultats de régressions unidimensionnelles des variables continues de l'analyse vis-à-vis des revenus du marché des fils et des filles. Il faut voir dans les données du tableau la variation de la variable dépendante (soit le revenu des fils ou des filles

également considérable. Fait remarquable également, les hommes dont le père a touché des prestations d'a.-c. gagnaient en moyenne 3 760 \$ de moins que leurs congénères, tandis que les femmes dont c'était également le cas avaient un manque à gagner d'environ 2 700 \$. Les participants dont le parent n'avait pas déménagé pendant les premières années de l'adolescence gagnaient environ 800 \$ de plus que ceux qui avaient déménagé une fois, tandis que la donnée atteignait près de 4 000 \$ si le parent avait déménagé au moins trois fois dans une période de cinq ans. En dernier lieu, il importe de signaler que les individus issus de familles qui comp- taient un mari et une femme gagnaient entre 3 500 \$ et 4 500 \$ de plus que ceux qui éma- naient de familles d'autres catégories. En fait,

assujéti à des problèmes d'attrition ou à des erreurs de déclaration qui entachent presque invariablyment les données d'enquête. De plus, nous disposons de données très détaillées sur la composition du revenu, ce qui nous permet d'établir une distinction entre le revenu d'emploi, le revenu d'un travail autonome, le revenu de biens, les prestations d'a.-c., l'allocation familiale et le revenu « autre »<sup>4</sup>. Nous avons retenu le revenu de 1982 (et ses composantes) du père aux fins de l'analyse de régression. (L'annexe décrit en détail les données utilisées.)

Nous avons utilisé les documents de l'impôt sur le revenu à l'échelle du pays afin d'établir les caractéristiques du quartier habité par l'ensemble père-enfant. Aux fins de notre étude, « quartier » s'entend de la région de tri d'acheminement (RTA) représentée par les trois premiers symboles du code postal en 1982. Nous avons jugé si le capital social de l'enfant était intact ou non d'après le nombre de déménagements effectués par le père entre 1978 et 1982. Ces renseignements sont tirés des codes postaux figurant sur les déclarations de revenus produites par le père au cours des années en question. Un déménagement était réputé avoir eu lieu si le code pos-tal changeait d'une année à la suivante.

Parmi les autres variables que nous avons pu recueillir figurent la province de résidence, le revenu gagné par les autres membres du ménage, le nombre d'enfants que comptait le ménage et la langue officielle dans laquelle la déclaration de revenus était produite (français ou anglais). Nous avons également de l'information sur la structure familiale, dont nous re-connaissions les catégories suivantes : couple marié dont seul le père est un déclarant; couple marié dont les deux membres sont des déclarants; père célibataire; père participant à une union libre.

Les données administratives, si elles sont supérieures sous certains rapports aux données d'enquête, présentent également certains inconvénients. Par exemple, nous ne pouvions en-tirer des renseignements sur certains corrélats communs de la mobilité intergénérationnelle du revenu, c'est-à-dire le degré de scolarité des parents, aussi bien que leur profession et leur taux de rémunération. Un autre inconvénient éventuel tient à la possibilité d'avoir prélevé une population de façon non aléatoire. Tout particulièrement, il nous faut connaître le NAS de l'enfant pour le jumeler à son père, ce qui signifie qu'il doit avoir exercé une activité sur le marché du travail au point d'avoir dû produire une

En dernier lieu, nous n'examinons pas les ménages dont le chef est une mère seule, groupe dont l'importance est souvent signalée dans les discussions sur la pauvreté de l'enfant. En choisissant des particuliers qui bénéficiaient de la présence d'un père, nous voulions franchir la première étape d'une analyse poussée et, notamment, choisir, d'entrée de jeu, un échantillon semblable à ceux qui ont servi à une part importante des écrits spécialisés portant sur la mobilité intergénérationnelle du revenu. Le recours à des données administratives dans le cadre d'études sur la question est un fait nouveau et notre choix d'échantillon est motivé par le désir de disposer de moyens de comparer nos résultats au contenu des études existantes, lesquelles reposent presque sans exception sur des données d'enquête. Dans ces conditions, il y a lieu d'interpréter nos constatations à titre de scénario du « meilleur » cas.

Le tableau 5.1 présente le revenu moyen du marché des fils et des filles que compte l'échantillon, selon une classification croisée d'après les variables discrètes les plus pertinentes que comprend notre analyse. (Les tableaux 5A.1 et 5A.2, figurant en annexe, dénombrent l'ensemble intégral des statistiques descriptives.) La plupart des moyennes correspondant aux caractéristiques d'un groupe présentent des différences statistiques selon les résultats de tests t ou F, bien que des exceptions soient à signaler, notamment l'indicateur de la langue de la majorité pour ce qui est des fils et ceux du revenu d'emploi et de l'allocation familiale quant aux filles. Les écarts les plus marqués se rapportent à la présence de revenu de biens. Les fils de pères ayant déclaré des revenus de biens touchaient en moyenne une tranche de rémunération de 5 000 \$ en sus de celle de leurs congénères dont ce n'était pas le cas. Quant aux filles de la même catégorie, l'écart entre les deux groupes, quelque 4 100 \$, est



seaux<sup>3</sup>.  
À titre d'exemple, Coleman constate, d'après la série de données sur les États-Unis dont il dispose, que la probabilité de décrochage au secondaire est plus élevée, par une marge de 50 %, chez les personnes qui ont déménagé au moins

Le groupe de variables dénombrées ci-dessus est assorti d'une mesure de ce que Coleman (1988) a qualifié de « capital social », mais qu'il est possible d'apparenter, de façon plus générale, à un aspect des effets exercés par le réseau ou le groupe de pairs. Il voit trois dimensions au capital-social : la série d'attentes et d'obligations (essentiellement des réputations) qui se forment dans la collectivité, le jeu de voies d'information et l'ensemble de normes ou de sanctions qui existent à l'échelle de la collectivité. Si les trois ont de l'importance par rapport à la mobilité intergénérationnelle des enfants, il se concentre néanmoins sur les conditions qui permettent l'apparition de la troisième série mentionnée. Une série solidement fondée de normes ou de sanctions est capable de renforcer l'investissement qu'engagent les parents dans le capital humain des enfants. Notamment, il avance que ces conditions atteindront un sommet là où la relation entre les enfants, par exemple à l'école, fait écho à celles qu'entretiennent les parents, à savoir là où les parents sont liés d'amitié avec le père et la mère des copains et copines. S'il n'offre pas de mesures directes de cette « boucle intergénérationnelle », il estime qu'une mesure de substitution acceptable consiste en le nombre de fois que l'enfant a changé d'école, car la donnée en la matière traduit un manque de continuité et, partant, la dissolution des res-

collectivité influence directement les résultats qu'obtiendront les enfants sur le marché du travail, ce en raison de la nature et de la qualité des écoles et des autres infrastructures que compte la collectivité. Il peut également exister des effets découlant des pairs et des réseaux qui encouragent la réussite à l'école et sur le marché du travail. La tendance à abandonner ses études au secondaire est souvent envisagée sous ces angles. Qui plus est, il est possible que les quartiers caractérisés par une large fourchette de revenus et de composantes du revenu n'annoncent l'existence d'un large gamme d'effets négatifs ou positifs. Par conséquent, les variables relatives au quartier, outre le revenu médian, englobent l'écart-type du revenu de la collectivité, la part des déclarants du quartier qui bénéficient de l'a.-c., et la part qui tirent un revenu d'un travail autonome.

Nous nous sommes intéressés aux données sur l'impôt sur le revenu de 1994 d'une cohorte de jeunes hommes et de jeunes femmes et à des renseignements comparables se rapportant à leur père à la fin des années 1970 et au début des années 1980. En bref, nous avons prélevé un échantillon d'individus âgés de 16 à 19 ans en 1982, à condition qu'ils aient produit une déclaration de revenus cette année-là (tandis qu'ils habitaient avec leurs parents), que leur père ait été présent la même année, et qu'ils aient donc été âgés entre 28 et 31 ans en 1994. Notre échantillon est très nombreux (comptant quelque 400 000 ensembles père-enfant), et il n'est pas

## 2. Une analyse descriptive

La dernière série de variables que nous retenons concerne la structure familiale. Il s'agit entre autres d'indicateurs qui révèlent si le père était marié ou célibataire ou s'il participait à une union libre. Ils précisent également le nombre de frères et sœurs que compte le ménage. Le fait de grandir dans une famille non éclatée est souvent considérée comme avantageux pour les enfants (Le Bourdais et Marci-Garron, chapitre 6; Dooley et coll., chapitre 7; Manski et coll., 1992; McLanahan et Sandefur, 1994). Nous nous reportons également aux enseignements sur l'activité des autres membres du ménage sur le marché du travail, à savoir si le conjoint était employé ou non et le revenu gagné. Les renseignements en question offrent non seulement un contrôle de la totalité des ressources économiques dont dispose le ménage mais éclairent également l'existence éventuelle d'influence exercée par des modèles de comportement, et, s'il y a lieu, son ampleur. À titre d'exemple, il est possible que l'activité qu'exerce la mère sur le marché du travail et le revenu qu'elle y gagne influencent les résultats qu'obtiendront les filles sur le marché du travail plus qu'ils ne le feront chez qu'y connaîtront les fils.

une fois (16,7 % contre 11,8 %), et environ le double pour celles qui ont déménagé deux fois (23,1 % contre 11,8 %). Fait à noter, cependant, il est difficile d'y voir l'effet direct du « capital social » si le nombre de déménagements est lié à des caractéristiques non observées des parents qui sont également déterminantes de la mobilité intergénérationnelle (Aaronsen, 1996). Malgré cela, l'analyse offerte par Coleman porte à croire à l'existence d'une variable éventuellement lourde de conséquences et qui est rarement prise en considération dans les études de



variables de cette catégorie, lesquelles correspondent à chaque type de revenus que nous retenons : gains, revenu d'un travail autonome, revenu de biens, prestations d'a.-c., allocations familiales et autres revenus.) La seconde série de variables touchant au revenu du père correspond simplement au montant du revenu provenant de chacune des sources.

L'analyse offerte par Hill et Duncan (1987) nous a motivés à retenir cette formule, notamment à distinguer les effets du « premier dollar » de ceux des « dollars supplémentaires ». Les auteurs précités signaient que les tenants d'explications économiques de la mobilité intergénérationnelle du revenu ont tendance à considérer le revenu comme une ressource capable d'être investie dans le capital humain des enfants, tandis que ceux qui préconisent les explications non économiques reconnaissent que le revenu des parents peut être le signe d'autres caractéristiques (par exemple des attitudes et des aspirations) qui présentent de l'importance par rapport aux résultats qu'obtiendront les enfants.

Hill et Duncan donnent à entendre que la théorie de la dynamique intergénérationnelle de Becker avance implicitement que le revenu est parfaitement fongible. Becker (1991) soutient notamment que la variation des transferts de revenu en faveur de la famille débouchera sur la réaffectation compensatrice des ressources familiales, de telle sorte que l'incidence de l'investissement dans le capital humain des enfants ne varie pas. Hill et Duncan estiment que les différentes sources de revenu familial devraient exercer le même effet sur le capital humain dont profite l'enfant. À savoir, les coefficients traduisant l'ampleur de chaque catégorie de revenu dans un modèle comme celui qui est décrit ci-dessus devraient être identiques. Cette façon de voir tranche avec la théorie de la socialisation, laquelle est centrée sur les modèles de comportement que les parents offrent aux enfants. Hill et Duncan proposent que le revenu d'un travail que les parents tirent d'une source particulière peut traduire la réussite sur le marché du travail et offrir à l'enfant un modèle qui influencera les résultats qu'il y obtiendra. À signaler que l'influence devrait être plus importante dans les rapports entre père et fils que dans ceux qui lient les pères et les filles. Cette vision des choses laisse entendre que les coefficients estimés selon les diverses composantes du revenu devraient différer. Mayer (1997) invoque un raisonnement semblable pour proposer que si différentes sources de revenu exercent des influences diverses, alors l'argent n'est pas le seul

facteur qui détermine les résultats que connaît l'enfant.

L'une des variantes de cette perspective tient à l'incidence des transferts gouvernementaux. Comme le succès obtenu sur le marché du travail peut servir de modèle de comportement positif qui incite l'enfant à de bons résultats, il est possible également de soutenir que la dépendance à l'égard des transferts a un effet contraire. Le raisonnement de la « culture du bien-être » a souvent été soulevé aux États-Unis (Gottschalk, 1990; Levine et Zimmerman, 1996). Dans la même optique, nous établissons une distinction entre le revenu tiré du marché et celui qui provient de sources autres (notamment l'a.-c. et l'allocation familiale). Ainsi, nous nous attendrions, par exemple, à l'existence d'un coefficient distinct relatif au revenu du père tiré de l'a.-c. par opposition à celui qui concerne les sources de revenu du marché (notamment les gains et le revenu d'un travail autonome).

Si nous voulons donner suite à des hypothèses de cette nature, il importe de neutraliser toutes les autres caractéristiques du père capables d'influencer les éventuels résultats qu'obtiendra l'enfant sur le marché du travail. Dans le cas contraire, il est très probable que les mesures de revenu seront en corrélation avec les caractéristiques non mesurées du père qui se rapportent aux caractéristiques productives du fils. Hill et Duncan sont d'avis que cette situation risque de se produire en présence de revenu de biens non transmis en héritage ou d'aide au revenu. En pareil cas, nous nous attendrions à ce que les effets du premier dollar en revenu de biens et en revenu de transferts soient importants, et à ce qu'ils soient positifs dans le premier cas et éventuellement négatifs dans le second. Voilà principalement pourquoi nous avons choisi d'inclure les effets du premier dollar dans nos modèles de régression.

Nous recourons au second ensemble de variables également en raison des effets de démonstration ou de modèles de comportement. On estime souvent que ces effets ne s'exercent pas uniquement au sein de la famille, mais également dans la communauté ou le quartier, et on leur prête une éventuelle importance particulière pour les individus au début de l'adolescence (par opposition aux enfants en âge de fréquenter l'école primaire)<sup>2</sup>. Les conditions économiques globales d'un quartier, mesurées par le revenu moyen ou médian, constituent éventuellement un indicateur de pareille situation. Il se peut, évidemment, que le niveau de revenu de la

plus importants corrélats du revenu d'un adulte est celui qui correspond à la déclaration ou à la non-déclaration par le père de revenu tiré de biens. Le seul fait de la présence de revenu de cette catégorie donne lieu implicitement à une prime de quelque 3 000 \$ par rapport au particulier dont le père n'a pas déclaré de revenu de cette source. Le contraire est vrai, bien que dans une moindre mesure, si le père a déclaré être prestataire de l'assurance-chômage (a.-c.). Par ailleurs, le revenu provenant de l'a.-c. n'exerce pas d'effets statistiquement significatifs sur le revenu gagné des enfants devenus adultes. Ré-entre le revenu tiré du marché et celui que gagna l'enfant à l'âge adulte, tandis qu'aucun rapport d'importance n'existe avec le revenu de sources autres que le marché. Nous relevons également une très forte influence de la structure familiale sur les résultats que connaissent les enfants sur le marché du travail : normalement le revenu des personnes apparentées (notamment l'influence du revenu de la mère sur celui de la fille), le nombre de frères et sœurs et l'état de chef de famille monoparentale. Certains des résultats donnent à penser que les parents, par le jeu de leur comportement sur le marché du travail, offrent d'importants modèles de comportement aux enfants.

Parmi les autres grands facteurs d'arrière-plan qui influencent le revenu du particulier figurent le revenu médian du quartier habité et le fait que le père soit démenagé ou non au cours de l'adolescence du particulier. Un fils peut s'attendre à gagner en moyenne 400 \$ de plus à l'âge de jeune adulte par tranche de 1 000 \$ de progression du revenu médian du quartier, bien que l'effet dont bénéficie la fille à ce chapitre ne soit qu'environ le cinquième de celui qui profite au fils. Qui plus est, les personnes, peu importe le sexe, qui déménagent une ou plusieurs fois au cours de l'adolescence connaissent un manque à gagner entre 500 \$ et près de 2 000 \$ par rapport à celles dont ce n'est pas le cas.

Si notre analyse jette effectivement des bases sur lesquelles nous pouvons prendre appui pour intégrer des explications tant économiques que sociologiques de la mobilité inter-générationnelle du revenu, nous nous gardons religieusement d'interpréter un tant soit peu la cause de nombre de nos constatations. Nous sommes d'avis que les variables que nous mettons en lumière, particulièrement la présence de revenu de biens et même l'a.-c., sont le signe de variables non observées relatives à la structure

des familles et aux caractéristiques du particulier qui déterminent le revenu gagné à l'âge adulte. Dans cette optique, nous concluons provisoirement que des facteurs autres que simple-ment l'argent déterminent les perspectives de l'enfant sur le marché du travail.

### 1. Un cadre d'analyse

Le point de départ de l'analyse empirique de la dynamique du revenu intergénérationnelle est une équation qui se présente comme suit :

$$Y_{\text{enfant}}(i,t) = \beta_0 + \beta_1 Y_{\text{père}}(i,t-1) + \varepsilon(i)$$

si l'on pose que  $Y$  représente le revenu,  $i$  indique un indice de l'ensemble père-enfant et  $\varepsilon(i)$  est un élément aléatoire propre à l'ensemble. L'analyse a pour objet de parvenir à une estimation non biaisée de  $\beta_1$ , laquelle peut être apparentée, pour l'essentiel, à un coefficient de corrélation entre le revenu de l'enfant (à l'âge adulte) et celui de son père (gagné pendant l'adolescence de l'enfant). La corrélation est un indicateur large du degré d'égalité des chances sur le marché du travail et, compte tenu des résultats de recherches récentes, il semblerait que la valeur applicable au Canada soit la moitié de la donnée correspondante aux États-Unis. Cet état de chose révèle une grande mobilité sur le marché du travail canadien.

Notre analyse empirique vise à multiplier le nombre de variables explicatives du modèle, et elle s'articule autour de l'équation générale suivante :

$$Y_{\text{enfant}}(i,t) = f(\text{revenu du père et sa composition à } t-1, \text{ caractéristiques du quartier à } t-1, \text{ structure familiale à } t-1, \text{ autres contrôles à } t-1) + \varepsilon(i).$$

Notamment,  $Y_{\text{enfant}}$  signifie le revenu annuel à l'âge adulte de l'enfant, tel qu'il figure sur sa déclaration de revenus. Le plus souvent, nous nous reportons à une mesure du revenu qui correspond au revenu total du marché, c'est-à-dire le revenu provenant de toutes sources, moins la part éventuelle provenant de transferts du gouvernement (c'est-à-dire prestations d'a.-c. et soutien du revenu). Deux catégories de variables concernent le revenu du père. La première consiste en une série de variables indicatrices qui révèlent la présence de revenu d'un type donné. Elles correspondent à 0 si aucun revenu d'une source particulière n'est constaté et à 1 si les déclarations révèlent la présence d'au moins un dollar de revenu de la source. (Il existe six



# Comment faire son chemin dans la vie : Quelques corrélats de la mobilité intergénérationnelle du revenu au Canada

MILES CORAK ET ANDREW HEISZ

La pauvreté de l'enfance touche une corde extrêmement sensible chez les décideurs, et les Canadiens et Canadiennes en général, car le fait de grandir dans une famille « pauvre » peut avoir des conséquences à long terme. En effet, l'existence de l'enfant et de l'adolescent influence grandement, croit-on, la santé, la scolarisation et les résultats obtenus sur le marché du travail à l'âge adulte, et, fait remarquable, la pauvreté peut être transmise d'une génération à l'autre. Pour cette raison, la relation entre l'expérience de l'enfant et les résultats obtenus par l'adulte est d'une importance décisive en matière de politiques sur le marché du travail et de politiques sociales.

La relation précitée a été l'objet d'un important volume de recherches empiriques dans des domaines variés. Une part importante des écrits d'ordre économique est consacrée à l'examen de la corrélation entre le revenu des jeunes adultes et le revenu de leur père aux premières années de l'adolescence de ces derniers. Nombre d'études sociologiques portent également sur la corrélation susmentionnée, mais elles ont tendance à se concentrer sur la relation entre la profession du parent et soit la scolarité ou la richesse du parent et soit la scolarité ou la profession de l'enfant. Si ces corrélations ont une importance indiscutable—offrant au niveau le plus général une mesure de l'égalité des chances—il est probablement raisonnable d'évoquer la possibilité qu'elles ne parviennent pas à expliquer le processus en cours.

Il est de première importance de franchir ce seuil pour élaborer des politiques en connaissance de cause. Par exemple, les décideurs doivent comprendre l'importance que présente l'argent par rapport aux perspectives à long terme offertes aux enfants. Un revenu modeste est-il, en soi, l'un des déterminants d'une situation désavantageuse, ou est-il simplement le signe d'autres facteurs sous-jacents? Si des facteurs autres qu'un revenu modeste sont les véritables

déterminants des perspectives offertes à l'enfant, il faut donc élaborer des politiques dont l'effet ne se limite pas simplement à transférer de l'argent aux parents. Mayer (1997) résume clairement la question. Notre objectif consiste à entamer un examen d'éventuelles corrélations qui expliquent comment les enfants améliorent leur situation dans la vie.

Le présent chapitre traite principalement de l'étendue et de la nature de la mobilité intergénérationnelle du revenu, à savoir la mesure dans laquelle le revenu d'un particulier (adulte) est en rapport avec celui de ses parents (au moment de son enfance). À cette fin, notre analyse se rapporte aux écrits économiques sur lesquels se sont penchés, par exemple, Becker et Tomes (1986) et, plus récemment, Björklund et Jäntti (1997). Cela dit, nous abondons dans le sens de Hill et Duncan (1987), car nous estimons qu'en faisant la distinction entre les diverses composantes du revenu familial, il est possible d'intégrer des explications à la fois économiques et sociologiques à un modèle empirique de la mobilité du revenu.

Nous mettons à contribution des données liées au système de l'impôt sur le revenu afin d'examiner la mobilité du revenu d'un échantillon nombreux de jeunes Canadiens et Canadiennes, et nous signalons dans un premier temps l'existence d'une grande mobilité du revenu au Canada (éventuellement supérieure à celle qui existe aux États-Unis). Malgré cela, nous constatons une importante relation entre le niveau de revenu du père et celui que son fils ou sa fille gagnera à l'âge adulte. Nous analysons cette relation en nous fondant sur trois grandes séries de facteurs, à savoir le revenu du père et sa composition, les caractéristiques du quartier, la position, le statut familial. Nous constatons que le revenu d'un particulier n'est pas lié simplement à sa composition. Tout particulièrement, l'un des



CORAK, Miles et Andrew HEISZ (1998). « De père en fils : la mobilité intergénérationnelle du revenu au Canada », Ottawa : Statistique Canada, Direction des études analytiques, document de recherche n° 113.

CORAK, Miles et Andrew HEISZ (1995). « The Intergenerational Income Mobility of Canadian Men. » *Canadian Business Economics*. Vol. 4, 59-69.

FORTIN, Nicole M. et Thomas LEMIEUX (1997). « Income Redistribution in Canada: Minimum Wages versus Other Policy Instruments. » *Policy to a Labour Market in Transition* conference, Institute for Research on Public Policy.

DEARDEN, Lorraine, Stephen MACHIN et Howard REED (1997). « Intergenerational Mobility in Britain. » *Economic Journal*. Vol. 107, 47-66.

DEARDEN, Lorraine, Stephen MACHIN et Howard REED (1995). « Intergenerational Mobility in Britain. » *The Institute for Fiscal Studies*, Document de travail n° 95/20.

NEWY, Whitney K. (1985). « Generalized Method of Moments Specification Testing. » *Journal of Econometrics*. Vol. 29, 229-256.

PETERS, H. Elizabeth (1992). « Patterns of Intergenerational Mobility in Income and Earnings. » *Review of Economics and Statistics*. Vol. 74, 456-466.

PINEO, Peter C. (1985). « Revisions of the Pineo-Porter-McRoberts Socioeconomic Classification of Occupations for the 1981 Census. » *Program for Quantitative Studies in Economics and Population*, McMaster University, Document de recherche n° 125.

PINEO, Peter C., John PORTER et Hugh A. McROBERTS (1977). « The 1971 Census and the Socioeconomic Classification of Occupations. » *Revue Canadienne de Sociologie et d'Anthropologie*. Vol. 14, 91-101.

SOLOMON, Gary (1992). « Intergenerational Income Mobility in the United States. » *American Economic Review*. Vol. 82, 393-408.

ZIMMERMAN, David J. (1992). « Regression Toward Mediocrity in Economic Stature. » *American Economic Review*. Vol. 82, 409-429.

# Bibliographie

ALTONJI, Joseph G. et Thomas A. DUNN (1991). « Relationships among the Family Incomes and Labor Market Outcomes of Relatives. » *Research in Labor Economics*. Vol. 12, 269-310.

ATKINSON, Anthony B. (1981). « On Intergenerational Income Mobility in Britain. » *Journal of Post-Keynesian Economics*. Vol. 3, 194-217.

BECKER, Gary S. et Nigel TOMES (1986). « Human Capital and the Rise and Fall of Families. » *Journal of Labor Economics*. Vol. 4, S1-S39.

BJÖRKLUND, Anders et Markus JÄNTTI (1997). « Intergenerational Mobility of Economic Status: Is the United States Different? » *Communication présentée au Annual Meetings of the American Economic Association*, New Orleans.

L'étude que voici reprend en partie la thèse de maîtrise effectuée par Mme Letebvre à l'Université de Montréal. Mme Fortin remercie le Conseil de recherches en sciences humaines du Canada ainsi que le Fonds FCAR du Québec pour leur aide financière. Les opinions émises dans le présent document n'engagent que leur auteurs et ne doivent en aucun cas être attribuées à Statistique Canada.

<sup>1</sup> Précisons que les tableaux du recensement donnent le revenu moyen des personnes de 15 ans et plus. Le nombre de jeunes qui détiennent un emploi ayant diminué entre 1986 et 1990, il se pourrait que l'âge moyen de l'échantillon ait augmenté, de sorte que ce dernier se serait rapproché davantage de notre propre échantillon.

<sup>2</sup> La variation entre les résultats de 1986 et 1994 n'est pas statistiquement significative. En outre, l'erreur-type indiquée ne tient pas compte du fait que le revenu du père est une estimation, donc qu'il y a sans doute surestimation de l'erreur-type véritable.

<sup>3</sup> Le revenu professionnel moyen estimé pour l'échantillon de filles correspond au revenu professionnel moyen d'un échantillon de femmes.

# Notes

Tableau 4.6 – fin  
Matrices de transition à quartiles

D. Pères – Filles, 1994

		Filles			
		Haut	2 <sup>e</sup>	3 <sup>e</sup>	Haut
		Bas	2 <sup>e</sup>	3 <sup>e</sup>	Haut
Pères	Bas	0,256 (0,018)	0,274 (0,019)	0,244 (0,018)	0,22 (0,017)
	2 <sup>e</sup>	0,281 (0,019)	0,27 (0,018)	0,239 (0,018)	0,211 (0,017)
	3 <sup>e</sup>	0,25 (0,018)	0,229 (0,018)	0,246 (0,018)	0,281 (0,019)
	Haut	0,187 (0,016)	0,236 (0,017)	0,25 (0,018)	0,326 (0,019)
Indice d'immobilité = 0,275					

**Nota :** Le revenu des enfants correspond au revenu résiduel corrigé pour l'âge, tandis que le revenu du père correspond au revenu professionnel moyen après élimination de la tendance temporelle.  
( ) erreur-type attribuable à la variabilité de l'échantillonnage; elle devrait être considérée comme la limite inférieure de l'erreur type réelle.

donnent à penser que la plus forte mobilité intergénérationnelle du revenu notée au Canada, comparativement aux E.-U. ou au R.-U., dérive principalement de la mobilité accrue aux extrémités inférieure et supérieure de la distribution du revenu.

#### 4. Conclusion

Dans ce chapitre, nous avons combiné les données sur le revenu d'emploi moyen venant des recensements de 1951 à 1991, accessibles au public, à celles de l'Enquête sociale générale de 1986 et 1994 en vue d'estimer la mobilité intergénérationnelle du revenu. Nous avons pour cela appliqué l'approche des variables instrumentales aux méthodes d'estimation habituelles par modèle loglinéaire et procédé à quelques analyses de cohortes sur les mêmes données. Les estimations issues du modèle loglinéaire ressemblent à celles obtenues par Corak et Heisz (1995, 1998), la seule autre étude canadienne du genre pour l'instant. Les résultats laissent croire que la mobilité intergénérationnelle est plus grande au Canada qu'aux E.-U. ou au R.-U., où des travaux récents indiquent que les estimations antérieures surestimaient le degré de mobilité. À cause d'un échantillon légèrement plus important, nous avons pu effectuer une analyse par cohorte de naissances. Cette dernière montre que le degré de mobilité intergénérationnelle du

revenu augmente dans le temps. Les groupes d'âge plus jeunes profitent aussi d'une mobilité supérieure du revenu. Enfin, les matrices de transition à quartiles que nous avons bâties suggèrent que la plus forte mobilité intergénérationnelle relevée au Canada, comparativement aux E.-U. et au R.-U., provient d'une mobilité accrue aux extrémités supérieure et inférieure (dans une moindre mesure) de la distribution du revenu. La prochaine étape afin de dégager des implications concrètes vis-à-vis les politiques publiques, consistera à étudier le processus dynamique existant quant à la transmission du niveau de vie d'une génération à l'autre.

Quelques avertissements importants s'imposent quant à l'évaluation de nos résultats. Le code détaillé des professions n'apparaissant pas dans les fichiers à grande diffusion de l'Enquête sociale générale, nous avons été contraints d'estimer le revenu d'emploi moyen pour 15 groupes de professions seulement. Il est difficile de déterminer si l'établissement d'une telle moyenne, plutôt que l'emploi de catégories détaillées et de personnes d'âges distincts, nous rapproche plus de l'estimation idéale du revenu permanent du père que les estimations reposant sur l'établissement du revenu moyen d'un particulier pour quelques années. La meilleure façon de tester notre méthode serait de l'appliquer aux mêmes données américaines utilisées dans d'autres études et de comparer les résultats.

Tableau 4.6  
Matrices de transition à quartiles

A. Pères – Fils, 1986				
Fils				
	Bas	2 <sup>e</sup>	3 <sup>e</sup>	Haut
Pères	Bas	0,285	0,279	0,234
	2 <sup>e</sup>	0,293	0,239	0,212
	3 <sup>e</sup>	0,232	0,258	0,256
	Haut	0,184	0,222	0,296
Indice d'immobilité = 0,276				
Fils				
	Bas	2 <sup>e</sup>	3 <sup>e</sup>	Haut
Pères	Bas	0,26	0,277	0,264
	2 <sup>e</sup>	0,265	0,251	0,234
	3 <sup>e</sup>	0,254	0,213	0,278
	Haut	0,187	0,241	0,231
Indice d'immobilité = 0,280				
Filles				
	Bas	2 <sup>e</sup>	3 <sup>e</sup>	Haut
Pères	Bas	0,265	0,272	0,278
	2 <sup>e</sup>	0,276	0,248	0,231
	3 <sup>e</sup>	0,28	0,23	0,232
	Haut	0,171	0,233	0,276
Indice d'immobilité = 0,271				
C. Pères – Filles, 1986				
Filles				
	Bas	2 <sup>e</sup>	3 <sup>e</sup>	Haut
Pères	Bas	0,265	0,272	0,278
	2 <sup>e</sup>	0,276	0,248	0,231
	3 <sup>e</sup>	0,28	0,23	0,232
	Haut	0,171	0,233	0,276
Indice d'immobilité = 0,271				



présente sur le modèle de régression logarithmique est qu'elle permet d'établir s'il existe une plus grande ou une plus faible mobilité au bas ou au sommet de l'échelle des revenus. Le degré de mobilité du revenu dans les derniers quantiles de la distribution intéressera plus ceux qui s'interrogent sur l'existence d'une « sous-classe » que le degré moyen de mobilité inter-générationnelle. Précisons toutefois que notre étude n'aborde pas la question d'un éventuel «cercle vicieux de la pauvreté», car elle se limite à la mobilité de la rémunération. Les familles canadiennes qui se retrouvent dans les déciles les plus bas du ratio entre le revenu familial et les nécessités comptent rarement un soutien économique (Fortin et Lemieux, 1997). En outre, il convient de se rappeler que les matrices de transition à quantiles ne permettent qu'un examen très grossier des non-linéarités que peut présenter le mécanisme de transmission. Corak et Heisz (1998) étudient cet aspect beaucoup plus en détail au moyen de méthodes de régressions non paramétriques.

La méthodologie des matrices de transition est la suivante. Pères et enfants sont classés selon leur revenu, puis divisés (dans le cas qui nous intéresse) en quatre groupes de taille identique. Les membres du premier groupe se caractérisent par le revenu le plus faible et ceux du quatrième, par le revenu le plus élevé. On bâtit ensuite une matrice où chaque élément  $a_{ij}$  représente la probabilité qu'un enfant se retrouve dans le quartile  $j$  quand son père se trouvait dans le quartile  $i$ . Une matrice de ce genre illustre une propriété bi-stochastique. Si  $a_{ij}$  représente la proportion d'enfants de pères du quartile  $i$  qui se retrouvent dans le quartile  $j$ , alors,  $\sum_j a_{ij} = 1$ . On peut représenter les deux cas extrêmes de mobilité du revenu avec cette approche : la mobilité est totale quand chaque élément de la matrice est égal à 0,25 tandis que c'est l'immobilité lorsque les éléments diagonaux prennent la valeur 1 (et tous les autres, la valeur nulle).

Le tableau 4.6 présente les estimations obtenues au moyen des matrices de transition pour 1986 et 1994 (fils et filles). Les calculs reposent sur le revenu résiduel corrigé pour l'âge dans le cas des enfants des deux sexes et sur le revenu professionnel moyen après élimination de la tendance temporelle dans le cas du père. En général, les résultats révèlent une forte mobilité. Le taux de transmission du niveau de vie est inférieur à celui rapporté par d'autres chercheurs, y compris dans le quartile supérieur où la mobilité est souvent moins grande. La probabilité qu'un

fils dont le père se trouvait dans le quartile supérieur de la distribution du revenu reste dans ce quartile s'établit respectivement à 0,32 et 0,33 pour les échantillons de 1986 et 1994. Ces valeurs sont cohérentes avec celles de Corak et Heisz (1995), mais se situent nettement en-dessous de celles signalées par Peters (1992) pour les É.-U. (0,40) et par Dearden, Machin et Reed (1995) pour le R.-U. (0,39). Les mêmes observations s'appliquent aux filles, avec des estimations de 0,34 pour 1986 et de 0,33 pour 1994. Une autre constatation vaut la peine d'être mentionnée. Comparativement aux autres études, la mobilité du revenu s'avère passablement élevée dans le quartile inférieur de la distribution. De fait, les résultats de 1994 indiquent que les fils ayant un père dans le dernier quartile de la distribution sont plus susceptibles de se retrouver dans le deuxième ou le troisième quartile. Nous situons la probabilité que ces enfants restent dans le dernier quartile, comme leur père, entre 0,260 et 0,285, ce qui s'avère légèrement plus faible que les estimations de Peters et de Dearden et ses collaborateurs pour les É.-U. (0,42) et le R.-U. (0,315). Si nos estimations ne sont généralement pas statistiquement différentes de 0,25, Corak et Heisz (1995) rapportent une valeur plus élevée (0,353), statistiquement distincte du cas de mobilité parfaite. Les mêmes chercheurs (1998) précisent néanmoins qu'une désagrégation plus précise (usage de déciles ou de percentiles) concentre la résistance éventuelle du mécanisme de transmission dans les tranches de revenu les plus élevées et les plus basses. La mobilité du revenu suit donc une tendance générale qui se rapproche relativement du cas de la mobilité idéale, si on néglige les déplacements aux extrémités inférieure et supérieure de la distribution.

Pour comparer le degré de mobilité estimé dans les diverses études, il est bon de classer les différentes matrices à quantiles. On peut établir un indice d'immobilité en calculant le ratio entre la somme des éléments diagonaux et la somme des éléments de la matrice. Le tableau 4.6 montre que les couples père-fils se caractérisent par un indice d'immobilité de 0,28 contre 0,27 pour les couples père-fille. Ces estimations s'insèrent dans l'intervalle calculé par Corak et Heisz (1995), puisque ceux-ci ont obtenu un indice de 0,306 pour l'ensemble du Canada. Ces chercheurs soulignent que leurs résultats sont sensiblement plus faibles que ceux obtenus par d'autres pour le Royaume-Uni (0,3675) et les É.-U. (0,350). Pareilles constatations étaient les résultats de notre modèle logarithmique et

Les trois cohortes présentent des différences notables. Ainsi, l'estimation s'établit à 0,316 pour la première cohorte de couples père-fils, à 0,246 pour la deuxième et à 0,157 pour la troisième. Puisqu'on n'a procédé qu'à deux observations dans le temps, la différence d'âge entre les cohortes reste substantielle. Les résultats signalant une mobilité croissante dans le temps pour le fils devraient donc être interprétés avec prudence. Les couples père-fille suivent une tendance distincte avec des estimations de 0,265 pour la première cohorte, de 0,323 pour la deuxième et de 0,191 pour la dernière. La deuxième cohorte est celle qui illustre le plus fort degré de transmission du niveau de vie. Les résultats diffèrents pour les couples père-fille pour- raient s'expliquer par une variation du taux de participation des femmes d'une cohorte à l'autre. En effet, la deuxième cohorte correspond à la première génération de femmes à entrer sur le marché du travail en grand nombre. Le degré de transmission du niveau de vie entre deux générations paraît fluctuer de cohorte en cohorte, mais on ignore si la différence d'âge, l'existence de mécanismes de transmission distincts (par le truchement de l'accès universel à l'enseignement supérieur, par exemple) ou une plus grande dispersion du revenu dans les cohortes plus jeunes en sont la cause. Puisque le coefficient de transmission du niveau de vie est égal au coefficient de corrélation entre les deux générations multiplié par le ratio des écarts-types du revenu du père et des enfants, une hausse de 20 % de l'écart-type du revenu de l'enfant se traduirait par une augmentation de  $\beta$  de 0,03 lorsque le coefficient de corrélation est de 0,3.

En résumé, l'estimation du degré de mobilité intergénérationnelle du revenu gravite essentiellement autour de 0,2, valeur qu'on retrouve dans toutes les études antérieures qui recourent aux modèles articulés sur la régression des moindres carrés ordinaires. Certains ont soutenu que les estimations de ces études étaient faussées à la baisse parce que le revenu du père comportait des composantes transitoires. Quoi qu'il en soit, l'existence de telles composantes soit moins problématique dans la méthode d'estimation que nous avons retenue, une sous-estimation éventuelle de la variance réelle du revenu permanant du père en raison de la variance du revenu professionnel pourrait causer des difficultés. C'est pourquoi il vaut la peine de comparer nos résultats à ceux d'études récentes entreprises aux États-Unis, au R.-U. et surtout, au Canada. Le tableau 4.5 en présente quelques-uns. On se rend

compte que nos estimations du degré de mobilité intergénérationnelle du revenu (qui varient de 0,19 à 0,21) entre le fils et le père ressemblent fort à celles de l'autre étude canadienne. Corak et Heisz (1995) obtiennent en effet une valeur de 0,191 pour les couples père-fils lorsqu'ils appliquent la régression des moindres carrés à la moyenne quinquennale du revenu paternel. Leurs autres estimations sont encore plus faibles. Une interprétation plus conservatrice de nos résultats porterait essentiellement sur le groupe de quarante à cinquante ans, ce qui placerait l'estimation de la mobilité du revenu dans le bas de l'intervalle de 0,3. Réciproquement, dans les études américaines les plus récentes, Solon (1992) et Zimmermann (1992) situent  $\beta$  entre 0,413 et 0,538. Ces résultats reposent sur la régression des moindres carrés appliquée au revenu moyen du père sur quatre ou cinq ans. Les estimations d'Atkinson (1981) ou celles de Dearden, Machin et Reed (1997) sur les hommes du R.-U. sont aussi sensiblement plus élevées que celles obtenues par Corak et Heisz (1995, 1998) et par nous pour des Canadiens du même âge. Bien sûr, la méthodologie présente d'importantes variations. Cependant, les estimations canadiennes (dont les nôtres) demeurent nettement en-dessous de celles rapportées aux États-Unis et au R.-U., même quand on les compare à celles obtenues par Solon (1992), Zimmermann (1992) et Dearden, Machin et Reed (1997) (présentées au tableau 4.5) au moyen de la méthode des moindres carrés, et cela en dépit des carences qu'on leur reconnaît. On en conclut donc que le revenu se caractérise par une plus grande mobilité intergénérationnelle au Canada qu'aux États-Unis et au R.-U. Fait intéressant, Björklund et Jäntti (1997) parviennent à une conclusion analogue dans leur méta-étude : le degré de mobilité le plus faible parmi sept pays industrialisés se retrouve aux États-Unis et au R.-U. Nous nous efforçons maintenant de corroborer cette conclusion en estimant le degré de transmission du niveau de vie entre les générations par l'utilisation d'une technique différente.

### 3. La méthode de la matrice de transition

La matrice de transition à quantiles nous permet d'analyser les déplacements entre les quantiles de revenu, d'une génération à l'autre. Étant abondamment utilisée, cette méthode autorise la comparaison avec d'autres études. Le principal avantage que la matrice de transition à quantiles

Estimation de la mobilité intergénérationnelle du revenu dans d'autres études

Auteur	Pays et ensemble	Méthode d'estimation	Estimation de $\beta$
	de données	pour les couples	père-fils
Corak et Heisz (1995)	Canada, données fiscales	MCO et revenu d'une seule année du père	RT: 0,121-0,136 RA: 0,115-0,143
Altounji et Dunn (1991)	États-Unis, NLSY (1965-1967) 678-739 couples père-fils fils de 29 à 39 ans	MCO et revenu moyen du père avec contrôles pour l'âge	RA: 0,180 RH: 0,263
	États-Unis, PSID (1984) 348 couples père-fils fils de 25 à 33 ans	VI, instrumentation au moyen du revenu des années ultérieures et série complète de contrôles	RA: 0,218 RH: 0,282
Solon (1992)	États-Unis, PSID (1984) 348 couples père-fils fils de 25 à 33 ans	MCO et revenu d'une seule année du père	RA: 0,386 RH: 0,294
	États-Unis, NLSY(1981) 876 couples père-fils fils de 29 à 39 ans	MCO et moyenne de quatre ans du revenu du père	RA: 0,538 RH: 0,391
Zimmerman (1992)	Royaume-Uni, Enquête Rowntree (1975-1978) 288-307 couples père-fils fils de 25 ans et plus	VI et indice de Duncan pour la situation du père	RA: 0,417 RH: 0,485
		VI, instrumentation par étalement du quasi-écart	RA: 0,36 RH: 0,379
Atkinson (1981)		MCO	SH:0,358 RH:0,428
		MCO et corrections pour le cycle de vie	RH:0,415
Dearden, Machin et Reed (1995)	Royaume-Uni, NCDS(1991) 1,665 couples père-fils, 747 couples père-fils enfants de 23 et 33 ans	MCO et revenu d'une seule année du père	SH: 0,216 (fils) SH: 0,352 (filles)
		VI plus scolarité et classe sociale du père	SH: 0,581 (fils) SH: 0,669 (filles)
		Rémunération prévue plus scolarité et classe sociale du père	SH: 0,425(fils) SH: 0,469 (filles)

Nota : PSID - Panel Study of Income Dynamics; NLSY - National Survey Study of Youth; NDCS - National Child Development Study; RT - revenu total; RA - rémunération annuelle; SH - salaire hebdomadaire; RH - rémunération horaire.



Tableau 4.4  
Estimation du coefficient de mobilité intergénérationnelle du revenu  
par analyse de cohorte

Pères et fils		Pères et filles	
Cohorte née entre 1935 et 1945		Cohorte née entre 1946 et 1954	
0,265	(0,065)	0,246	(0,035)
[756]	[1 061]	0,323	[1 411]
Cohorte née entre 1955 et 1969		Cohorte née entre 1986 et 1994	
0,191	(0,041)	0,157	(0,034)
[2 021]	[2 248]		

Nota : (écart-type), [taille de l'échantillon].

coefficient  $\beta$  s'établit à 0,105 pour les couples père-fils de l'ESG de 1986, quand le fils a de 17 à 29 ans, à 0,201 lorsqu'il a entre 30 et 39 ans, et à 0,297, à l'âge de 40 à 59 ans. Les couples père-fille de l'échantillon de 1994 suivent une tendance identique, mais avec les données de 1986, le groupe qui se caractérise par la plus faible mobilité est celui des 30 à 39 ans. Il est intéressant de noter que ce groupe correspond à peu près à la cohorte de femmes qui avaient de 40 à 59 ans en 1994. Il se pourrait qu'il y ait des effets de cohorte. La mobilité accrue notée pour le groupe plus âgé en 1986 pourrait venir d'une modification au niveau du travail des femmes, ou simplement découler de la plus petite taille de l'échantillon. Pour corriger les effets du cycle de vie sur le revenu des enfants des deux sexes, on applique les valeurs résiduelles de la régression du revenu des enfants à l'âge et à l'âge au carré de ces derniers. Il se peut que cette correction ne saisisse pas tous les effets du cycle de vie. Une autre explication serait que les cohortes ne présentent pas toutes la même mobilité intergénérationnelle. La deuxième implication intéressante des résultats qui précèdent pour les études portant essentiellement sur les enfants dans le début de la trentaine est que le choix est représentatif de l'échantillon dans le cas des couples père-fils.

Le volet C du tableau 4.3 présente les résultats de l'approche articulée sur le revenu professionnel. Cette approche, rappelons-le, suppose que le mécanisme de transmission entre générations est le même pour le revenu permanent et le revenu professionnel. La valeur

Les échantillons peuvent aussi être divisés en cohortes de naissances (année approximative de la naissance). Une analyse de ce genre indiquera si le degré de mobilité intergénérationnelle du revenu varie dans le temps. Le tableau 4.4 fournit les résultats de l'analyse pour trois cohortes. Les personnes âgées de 50 à 59 ans en 1986 ont été supprimées de l'échantillon combiné, ce qui a permis d'obtenir deux observations dans le temps pour chaque cohorte. La première cohorte se compose de personnes nées entre 1935 et 1945 (donc des quadruplées-nées en 1986 et des quinquagénaires en 1994); la deuxième comprend des personnes nées entre 1946 et 1954 (dans la trentaine et la quarantaine en 1994); enfin, la troisième est constituée de personnes nées entre 1955 et 1969 (dans la vingtaine en 1986 et la trentaine en 1994). Les résultats indiqués au tableau 4.4 reposent sur l'approche VI.

Tableau 4.3  
Estimation du coefficient de mobilité intergénérationnelle

	Pères et fils		Pères et filles	
	1986	1994	1986	1994
A. Méthode des variables instrumentales				
	0,191	0,217	0,228	0,226
	(0,029)	(0,032)	(0,041)	(0,040)
	[3 400]	[2 459]	[2 474]	[2 308]
B. Méthode des variables instrumentales pour certains groupes d'âge				
17 à 29 ans	0,105	0,048	0,143	0,145
	(0,052)	(0,065)	(0,062)	(0,070)
	[1 103]	[651]	[959]	[681]
30 à 39 ans	0,201	0,218	0,324	0,218
	(0,043)	(0,051)	(0,063)	(0,064)
	[1 220]	[811]	[842]	[733]
40 à 59 ans	0,297	0,351	0,208	0,309
	(0,062)	(0,055)	(0,104)	(0,076)
	[1 077]	[997]	[673]	[894]
C. Méthode du revenu professionnel				
	0,185	0,202	0,155	0,139
	(0,017)	(0,021)	(0,020)	(0,024)
	[4 013]	[2 335]	[3 027]	[2 153]
D. Échantillon combiné méthode des variables instrumentales				
	0,208		0,228	
	(0,022)		(0,029)	
	[5 859]		[4 782]	

Nota : (écart-type), [taille de l'échantillon].

Le tableau 4.3 présente les résultats du modèle logarithmique pour les pères et le fils ainsi que les pères et les filles, pour chacune des deux enquêtes et pour l'échantillon combiné. Nous avons aussi analysé séparément trois groupes d'âge. De cette façon, nous pourrions comparer nos estimations à celles d'autres études qui se concentrent sur ces groupes d'âge. Au volet A du tableau apparaît la valeur du coefficient de mobilité intergénérationnelle ( $\beta$ ) estimée par l'approche VI. Avec les données de l'ESG de 1986, on estime  $\beta$  à 0,191 pour les couples père-fils et à 0,228 pour les couples père-fille. Les données de 1994 aboutissent essentiellement aux mêmes résultats, soit 0,217 et 0,226. Les tests de suridentification (Newey, 1985) permettent d'établir s'il subsiste une corrélation quelconque entre le terme d'erreur  $\eta_i$  et les variables nominales

OC<sub>it</sub>. La régression des valeurs résiduelles de l'équation (7) pour les variables OC<sub>it</sub> passe le test F de non-signification pour l'échantillon de fils et de filles de 1994. On en conclut que la méthode d'instrumentation est valable pour l'échantillon de 1994. L'échantillon d'enfants des deux sexes de 1986 réussit presque le test F, à 10 %, mais l'hypothèse nulle ne tient pas; les deux termes sont faiblement corrélés. Le fait que les estimations de 1986 et de 1994 ne diffèrent pas sensiblement est une autre indication que les biais sont très faibles.

Les résultats de la régression divisant les données en trois groupes d'âge apparaissent au volet B du tableau 4.3. On constate que la mobilité intergénérationnelle diminue avec l'âge pour le fils, dans les échantillons de 1986 et 1994. Le

pour l'année 1993. Cette unique mesure du revenu pourrait néanmoins s'écarter de la situation permanente à cause des effets de l'âge, que nous essayons de supprimer au moyen de facteurs de contrôle temporalisés susceptibles d'influer sur le revenu courant (plus précisément « âge » et « âge<sup>2</sup> »). Nous proposons aussi d'autres estimations en vertu desquelles le revenu du fils est instrumenté de la même façon que le revenu du père. Quoique cette mesure du revenu permanent puisse poser des difficultés, ces dernières n'ont pas nécessairement évolué dans des directions différentes selon le groupe d'âge ou au fil des ans, de sorte que les analyses de cohorte et les groupes d'âge retenus demeurent instructifs.

Nous recourons à deux approches distinctes pour estimer  $\beta$ . La première—que nous appelons « approche des variables instrumentales » (VI)—suppose que la profession est un instrument valable pour estimer le revenu permanent du père. Dans un tel cas, on peut exprimer le revenu du père comme suit :

$$y_{\text{parent}}^i = \gamma_{\text{parent}}^i \sum_{\text{Occ}_{\text{parent}}^i} + v_{\text{parent}}^i \quad (2)$$

où  $y_{\text{parent}}^i$  correspond au revenu professionnel du père l'année  $t$ ,  $\text{Occ}_{\text{parent}}^i$  représente un ensemble de variables nominales désignant la profession  $k$  ( $k=2$  à 16) durant l'année  $t$ ,  $\gamma_{\text{parent}}^i$  indique le revenu moyen pour la profession  $k$  l'année  $t$ , et  $v_{\text{parent}}^i$  est un terme d'erreur. Il est possible d'obtenir une mesure résiduelle de la situation permanente du parent,  $y_{\text{parent}}^i$ , en éliminant les composantes du revenu professionnel qui varient dans le temps,

$$\hat{y}_{\text{parent}}^i = \gamma_{\text{parent}}^i \sum_{\text{Occ}_{\text{parent}}^i} - \delta x_{\text{parent}}^i \quad (3)$$

où  $\hat{y}_{\text{parent}}^i$  est le revenu moyen estimatif pour la profession  $k$  l'année  $t$  et les facteurs temporels  $x_{\text{parent}}^i$  correspondent aux variables nominales associées à l'année où la profession du père a été observée.

Parallèlement, on n'observe pas le revenu permanent de l'enfant  $y_{\text{enfant}}^i$ , mais bien  $y_{\text{enfant}}^i$ , c'est-à-dire le revenu d'emploi à un moment précis dans le temps. Nous présumons que le revenu d'emploi au moment  $t$  est une fonction du revenu permanent  $y_{\text{enfant}}^i$ , de  $x_{\text{enfant}}^i$ , valeur vectorielle des facteurs temporels qui ont été observés et qui affectent la situation courante de l'enfant « adulte », et de  $w_{\text{enfant}}^i$ , un terme d'erreur transitoire :

$$y_{\text{enfant}}^i = y_{\text{enfant}}^i + \delta x_{\text{enfant}}^i + w_{\text{enfant}}^i \quad (4)$$

niveau de vie.

La deuxième approche—baptisée « approche du revenu professionnel » ( $\text{Occ}_{\text{inc}}$ )—suppose que les mécanismes de transmission sont identiques pour le revenu permanent et le revenu professionnel, bref que les principales caractéristiques du niveau de vie se transmettent par la situation professionnelle. La corrélation entre le revenu permanent du père et celui de l'enfant sera donc identique à celle entre le revenu professionnel de l'enfant et celui du père ( $\hat{y}_{\text{parent}}^i$  et  $\hat{y}_{\text{enfant}}^i$ ) :

$$\text{corr}(y_{\text{parent}}^i, y_{\text{parent}}^i) = \text{corr}(\hat{y}_{\text{parent}}^i, \hat{y}_{\text{parent}}^i). \quad (5)$$

Si l'hypothèse est correcte, on peut estimer la régression que voici :

$$\hat{y}_{\text{enfant}}^i = \alpha + \beta \hat{y}_{\text{parent}}^i + e_i \quad (6)$$

de sorte que

$$y_{\text{enfant}}^i = \alpha + \beta (\gamma_{\text{parent}}^i \sum_{\text{Occ}_{\text{parent}}^i} - \delta x_{\text{parent}}^i) + \eta_{\text{enfant}}^i \quad (7)$$

Pour calculer le revenu permanent, on régresse  $y_{\text{enfant}}^i$  au moyen des facteurs temporels  $x_{\text{enfant}}^i$  (âge, âge<sup>2</sup>) et prend la valeur résiduelle comme estimation du revenu permanent de l'enfant :

$$\hat{y}_{\text{enfant}}^i = y_{\text{enfant}}^i - \delta x_{\text{enfant}}^i = y_{\text{enfant}}^i + w_{\text{enfant}}^i \quad (8)$$

$$\hat{y}_{\text{enfant}}^i = \alpha + \beta \hat{y}_{\text{parent}}^i + e_i \quad (9)$$

où

$$\hat{y}_{\text{enfant}}^i = \hat{y}_{\text{parent}}^i \sum_{\text{Occ}_{\text{parent}}^i} - \delta x_{\text{parent}}^i$$

et

$$\hat{y}_{\text{parent}}^i = \hat{y}_{\text{parent}}^i \sum_{\text{Occ}_{\text{parent}}^i} - \delta x_{\text{parent}}^i, \text{ où } \hat{y}_{\text{parent}}^i$$

correspond au revenu estimé pour la profession  $k$  lors de l'année  $t$ , et où les facteurs temporels sont les mêmes qu'en (3). Si l'hypothèse concernant la similitude du mécanisme de transmission du revenu professionnel et du revenu permanent est exacte, et si les variables nominales pour la profession  $\text{Occ}_{\text{parent}}^i$  ainsi que les variables de tendance ne présentent aucune corrélation avec  $e_i$ , le coefficient estimé grâce à l'équation (9) correspondra à une estimation cohérente du coefficient de transmission réel du



celle de l'enfant. Quand la valeur de  $\beta$  se situe entre 0 et 1, il y a régression vers la moyenne, à un taux variant selon la valeur de  $\beta$ . Ainsi, plus  $\beta$  est faible, moins les probabilités que l'enfant hérite le niveau de vie du père seront grandes et plus forte sera la mobilité.

Les difficultés méthodologiques surgissent du fait qu'on n'observe pas le revenu permanent du père ou de l'enfant. On doit donc recourir à une approximation. Ainsi qu'on l'a déjà mentionné, Solon (1992) et Zimmerman (1992) croient que l'usage d'approximations incorporant des composantes transitoires peut créer un problème d'erreur au niveau des variables. Ces composantes débouchent sur une surestimation de la variance du revenu paternel, malgré l'absence générale de corrélation avec la situation «permanente». Il s'ensuivra une sous-estimation du véritable coefficient de transmission intergénérationnelle (égal à la covariance entre le revenu de l'enfant et celui du père divisée par la variance du revenu paternel). Nous ne nous heurtons pas aux problèmes qui pourraient résulter d'une surestimation de la variance du revenu du père. En réalité, la mesure du revenu paternel que nous avons obtenue pourrait sous-estimer la variance réelle au sein de la population, qui pourrait en soi aboutir à des estimations de  $\beta$  biaisées à la hausse. Cette légère dispersion du revenu du père peut toutefois aussi déboucher sur une plus faible covariance entre le revenu de l'enfant et celui du parent. C'est pour-quoi le sens du biais général s'avère difficile à établir dans les modèles proposés ici.

Nous nous servons du revenu d'emploi moyen du père quand l'enfant avait 15 ans, après élimination de la tendance temporelle. Pareille méthode revient à instrumenter le revenu du père avec sa profession, ce qui peut entraîner certaines préoccupations. Ainsi que l'explique Solon (1992), si la profession du père entre dans le modèle structurel du revenu du fils, il se pourrait que l'estimation de  $\beta$  par les variables instrumentales soit biaisée. Si la profession du père n'exerce aucune influence sur le revenu du fils, outre l'effet indirect attribuable au revenu paternel, l'estimation sera cohérente. Si la profession du père agit (positivement ou négativement) sur le niveau de vie du fils hors de l'effet résultant du revenu, en revanche, l'estimation sera faussée à la hausse ou à la baisse. Un test de suridentification nous permettra de voir si les estimations sont cohérentes. L'ESG de 1986 nous renseigne sur le revenu d'emploi des enfants en 1985 et l'ESG de 1994 en fait autant

mêmes cohortes, nous pourrions procéder à certaines analyses de cohorte et voir si la mobilité intergénérationnelle change avec les ans. Dearden, Machin et Reed (1997) se servent pour leur part de la *National Child Development Survey*, enquête permanente sur l'ensemble des personnes nées au R.-U. entre le 3 et le 9 mars 1958. Ces chercheurs n'ont accès qu'au revenu des enfants à 23 et à 33 ans, et ne disposent que d'une seule indication sur le revenu du père, soit lorsque ses enfants avaient 16 ans. Au Canada, Corak et Heisz (1995, 1998) ont constitué une cohorte de personnes de 27 à 31 ans à partir du revenu mentionné sur la déclaration de revenus et des moyennes pluriannuelles relatives au revenu du père.

Notre analyse s'inscrit dans le courant de la littérature actuelle et exploite deux cadres analytiques complémentaires : le modèle de régression loglinéaire et la matrice de transition à quartiles. Maints auteurs ont recouru à ces méthodes, ce qui permet des comparaisons. Le modèle de régression loglinéaire établit une simple relation linéaire entre les valeurs logarithmiques du revenu de l'enfant et du père. On peut y voir un examen du degré moyen de transmission du niveau de vie. La matrice de transition à quartiles tente de différencier plusieurs degrés de transmission par quartile de revenu. Elle permet d'établir si la mobilité est plus ou moins importante à la base ou au sommet de l'échelle des revenus.

## 2. Modèles de régression

Dans le modèle de régression loglinéaire, on estime que le logarithme du revenu permanent d'un enfant de la famille  $i$  ( $y_{\text{enfant}}^i$ ) est une fonction linéaire du logarithme du revenu permanent du père ( $y_{\text{parent}}^i$ ), ainsi que l'indique l'équation (1) :

$$y_{\text{enfant}}^i = \alpha + \beta y_{\text{parent}}^i + \varepsilon_i \quad (1)$$

où  $\varepsilon_i$  est un terme d'erreur de distribution égal à  $N(0, \sigma^2)$ , présume-t-on habituellement. Cette équation devrait être perçue comme la forme simplifiée d'un mécanisme complexe de transmissions économiques, où le coefficient  $\beta$  désigne le degré de mobilité entre les deux générations. Il existe deux cas extrêmes. En premier lieu, si  $\beta=0$ , la mobilité est totale, bref il y a entièrement régression jusqu'à la moyenne. Le revenu de l'enfant ne présente aucune corrélation avec celui du père. À l'autre extrême, si  $\beta=1$ , il y a immobilité. La répartition du revenu observée dans la génération du père se retrouve absolument dans

Tableau 4.2  
Statistiques descriptives

Filles		Fils		Filles		Fils	
1986		1986		1994		1994	
Âge	36,5	(10,70)	14,09	(2,57)	474,48 \$	521,83 \$	702,94 \$
					(365,79)	(383,50)	(383,50)
Scolarité	12,9	(3,08)	13,85	(2,98)	776,83 \$	702,94 \$	776,83 \$
					(456,86)	(383,50)	(456,86)
Revenu d'emploi hebdomadaire	641,35 \$	(241,83)	680,80 \$	(245,50)	641,35 \$	680,80 \$	641,35 \$
					(241,83)	(245,50)	(241,83)
Revenu professionnel hebdomadaire	9,2	(4,66)	10,5	(5,07)	362,23 \$	362,23 \$	362,23 \$
					(143,30)	(143,30)	(143,30)
Scolarité du père	10,6	(4,97)	9,3	(4,44)	398,58 \$	398,58 \$	398,58 \$
					(151,42)	(151,42)	(151,42)
Revenu professionnel hebdomadaire du père	493,08 \$	(223,61)	559,83 \$	(250,45)	474,48 \$	521,83 \$	559,83 \$
					(284,59)	(365,79)	(383,50)
Taille de l'échantillon	3 400	(223,61)	2 459	(250,45)	474,48 \$	521,83 \$	702,94 \$
					(284,59)	(365,79)	(383,50)

Nota : Les revenus sont exprimés en dollars constants de 1993. L'écart-type apparaît entre parenthèses. Source : Calculs des auteurs d'après l'Enquête sociale générale de Statistique Canada.

Les hommes de l'échantillon avaient en moyenne 35,5 ans en 1986 et 37,4 ans en 1994, contre 34,2 et 36,5 ans, respectivement, pour les femmes. Dans l'ensemble, ces dernières sont mieux instruites que les hommes. En outre, le père est moins scolarisé que ses enfants. Le revenu hebdomadaire estimatif que le fils tire d'un emploi est inférieur au revenu moyen signalé lors de l'ESG de 1986; la variation est beaucoup moins importante en 1994. Il est difficile d'établir si on le doit au cycle de vie ou s'il s'agit d'un effet cyclique<sup>1</sup>.

Par sa taille, notre échantillon se compare favorablement à celui d'études américaines récentes, qui reposaient sur aussi peu que 348 observations à un maximum de 876 (Altonji et Dunn 1991, Solon 1992, Zimmerman 1992). Au R-U, Atkinson (1981) a prélevé un échantillon d'hommes de York d'une étude de 1950 dont il a retrouvé les enfants à la fin des années 70. L'échantillon non aléatoire définitif comptait seulement 307 couples père-fils. Un autre avantage de nos données a trait à l'information qu'elles procurent sur les sujets de nombreuses autres cohortes. Disposant de deux observations sur les

au même point de leur vie, en supposant que leur cheminement ne change pas sensiblement avec le temps. On ignore l'âge du père, mais en présupmant un écart de 25 à 35 ans entre les deux générations, le père d'un enfant de 40 à 50 ans devrait se trouver au même stade de la vie que son enfant. Les estimations qui portent sur ce groupe d'âge sont donc moins susceptibles de connaître les problèmes résultant des professions transitoires et des effets du cycle de vie.

Nos échantillons de l'ESG se composent d'hommes et de femmes de 17 à 59 ans dont la principale activité au cours des 12 mois précédant l'enquête était d'avoir un emploi ou de travailler à leur compte. Le tableau 4.2 donne les principales caractéristiques des échantillons qui ont servi à l'estimation. Nous laissons de côté la mobilité intergénérationnelle du revenu entre les couples mère-fils ou mère-fille essentiellement parce que nous ne connaissons la profession de la mère que pour un échantillon passablement faible. Les échantillons comprenaient 3 400 couples père-fils et 2 474 couples père-fille pour l'ESG de 1986, et 2 459 couples père-fils et 2 308 couples père-fille pour celle de 1994.

Tableau 4.1  
Revenu d'emploi estimatif moyen des hommes, en dollars de 1993

Classification des professions		de Pineo-Porter-McRoberts					
		1950	1960	1970	1980	1985	1990
(dollars de 1993)							
Professionnels		20 888	32 457	43 547	54 153	53 928	54 872
Cadres supérieurs		23 223	36 734	81 227	71 378	69 702	68 871
Semi-professionnels		18 293	27 100	31 518	35 753	34 628	36 632
Techniciens		16 122	24 178	29 401	35 190	35 361	36 207
Cadres intermédiaires		15 793	18 194	44 405	46 226	42 607	45 425
Superviseurs		17 009	25 696	34 208	36 398	34 894	36 192
Contremaîtres		19 851	26 033	37 596	42 217	39 335	40 763
Personnel de bureau qualifié							
(ventes et services)		16 713	23 087	31 851	37 661	35 856	36 380
Hommes de métier et artisans qualifiés		15 381	20 852	27 941	32 205	30 835	32 155
Agriculteurs		11 714	17 258	15 568	25 589	19 772	20 190
Personnel de bureau semi-qualifié							
(ventes et services)		14 653	16 581	21 048	22 478	21 209	22 052
Manoeuvres semi-qualifiés		13 039	18 326	23 859	27 058	25 886	26 445
Personnel de bureau non qualifié							
(ventes et services)		11 701	17 671	20 201	23 483	21 736	21 976
Manoeuvres non qualifiés		11 549	14 197	18 736	22 143	21 093	22 030
Ouvriers agricoles		5 576	7 437	9 637	12 744	11 825	13 569

Source : Calculs des auteurs à partir de données de Statistique Canada.

entre le plus haut revenu et le revenu le plus faible, s'est sensiblement agrandi durant la période à l'étude. En 1950, les manoeuvres non qualifiées réalisaient un revenu moyen à peu près égal à la moitié du revenu des cadres supérieurs alors qu'en 1990, il en représentait moins du tiers.

La méthode que nous avons retenue mesure le revenu professionnel moyen des travailleurs à différentes époques de leur vie. Elle donne donc une meilleure idée du niveau de vie qu'une seule observation, effectuée à un moment précis dans le temps. Le revenu noté à une année quelconque comblera à la fois une composante permanente et une autre, transitoire. Selon (1992) et Zimmerman (1992) calculent le revenu moyen du père pour cinq années consécutives en vue d'atténuer le biais que pourrait entraîner l'existence de composantes transitoires. (idéalement, le revenu permanent devrait reposer sur une série d'observations couvrant la vie entière du sujet.) Il se pourrait que le revenu professionnel moyen que nous avons calculé soit pollué par des composantes transitoires, mais seulement si les mesures sont liées à un emploi transitoire. Que la profession du père signalée par le fils soit permanente ou transitoire pourrait

dépendre de l'âge du père. En effet, plus âgé sera ce dernier et plus grande sera la probabilité qu'il s'agisse d'un emploi permanent. On pourrait aussi se demander si les revenus que nous avons établis ne sont pas contaminés par les effets associés au cycle de vie. Le revenu moyen des cadres supérieurs est-il plus élevé à cause du niveau de vie, parce que les intéressés sont plus vieux ou parce que leur vie a suivi un cours plus abrupt? Il est impossible d'évaluer la variation de l'âge du père selon sa profession, mais l'âge moyen du fils varie quelque peu avec les professions de la classification Pineo-Porter-McRoberts, entre l'ESG de 1986 et celle de 1994. Ainsi, les cadres supérieurs et les contremaîtres ont en moyenne quatre ans de plus que les cadres intermédiaires et les hommes de métier qualifiés. Dans les autres professions, la différence d'âge moyen est plus faible. Pour résoudre le problème des variations du cycle de vie entre différentes professions, on pourrait procéder à des corrections différentes pour chaque profession. Si une telle stratégie s'avère réalisable pour les enfants, il n'en va pas de même pour le père, car on réduit simplement la corrélation entre le revenu du père et celui de l'enfant. Une autre solution consisterait à comparer père et enfant



fournit de nombreuses informations de cette nature et a autorisé toute une gamme d'études sociologiques sur la mobilité de la profession ou de l'éducation entre générations. On a notamment posé aux répondants de l'ESG de 1986 et de 1994 des questions très détaillées sur leurs parents. Les répondants ont ainsi offert des renseignements sur la situation d'emploi, la scolarité, la profession et la branche d'activité de leur père et de leur mère au moment où le répondant avait 15 ans. L'ESG nous renseigne également sur le sexe, l'âge, la scolarité, la profession et le revenu avant impôt tiré d'un emploi rémunéré ou d'un travail à son compte. L'absence de données sur le revenu des parents constitue toutefois une importante lacune pour l'analyse qui nous intéresse. C'est pourquoi nous avons élaboré une méthode permettant de quantifier le revenu des pères à partir de l'information disponible à leur sujet. La méthode d'estimation résultante est équivalente à la méthode d'instrumentation du revenu du père d'après sa profession, qui soulève des difficultés particulières, examinées à la partie 2.

Déterminer le revenu permanent des parents est une autre importante question connexe à l'estimation de la mobilité intergénérationnelle. Selon (1992) et Zimmerman (1992) ont montré qu'on peut sérieusement surestimer le degré de mobilité intergénérationnelle du revenu en n'utilisant que le revenu d'une année, surtout quand il s'agit d'un échantillon trop homogène. En émettant l'hypothèse que la profession est un instrument approprié afin d'estimer le revenu permanent du parent, nous avons relié les données de l'ESG sur la profession aux revenus moyens selon la profession par le biais des tableaux de recensement. Dans l'ESG de 1986, la profession des parents repose uniquement sur la classification socio-économique des professions de Pineo-Porter-McRoberts (Pineo, Porter et McRoberts 1977), système qui restreint la Classification type des professions du Canada (codes de 4 chiffres) de 1971 et de 1981 en 15 catégories, selon le niveau de qualification. Ces catégories passent respectivement des ouvriers agricoles, des manoeuvres et du personnel de bureau non qualifiés du secteur des ventes et des services aux manoeuvres semi-qualifiés, au personnel de bureau semi-qualifié du secteur des ventes et des services et aux cadres intermédiaires, aux techniciens et aux semi-professionnels et enfin,

aux cadres supérieurs et aux professionnels. Cet agencement par niveau de compétence constitue le principal avantage de la classification de Pineo-Porter-McRoberts sur la classification à deux chiffres des codes de profession de 1980 fournie par Statistique Canada. En effet, cette dernière n'est pas conçue pour mesurer le niveau de vie, de sorte qu'elle combine parfois les professions par secteur d'activité plutôt que niveau de compétence. On a d'ailleurs entièrement modifié les codes de profession de 1990 pour remédier à ce problème. Le système Pineo-Porter-McRoberts se prête relativement bien à notre propos puisqu'il est possible de l'appliquer aux systèmes de classification plus anciens (Pineo, 1985). Quoi qu'il en soit, il soulève d'autres problèmes. L'inconvénient d'une structure reposant sur les niveaux de compétence est que les classes résultantes peuvent illustrer une suite d'emplois plutôt qu'un véritable choix de carrière. Une façon d'améliorer l'estimation consistait à utiliser les codes détaillés des professions et à calculer un revenu moyen par profession, selon la scolarité. Malheureusement, il est impossible de recourir à pareille stratégie avec les données à grande diffusion.

Puisque les codes de profession détaillés à 4 chiffres n'apparaissent pas dans les fichiers à grande diffusion du recensement, nous sommes servies du revenu d'emploi moyen selon la profession des tableaux correspondants. Ces tableaux donnent le revenu moyen des travailleurs de 15 ans et plus, selon le sexe, pour les recensements de 1951 à 1991. Nous avons reclassifié chaque profession à 4 chiffres d'après la classification de Pineo-Porter-McRoberts dans chaque tableau du recensement et calculé le revenu d'emploi pondéré moyen pour les 15 catégories de profession. Le revenu estimatif moyen d'une profession correspond donc au revenu pondéré moyen venant d'une profession en 1950, 1960, 1970, 1980, 1985 et 1990. On note la profession du père au moment où le répondant avait 15 ans, soit de 1944 à 1982 pour l'échantillon de 1986 et de 1952 à 1990 pour celui de 1994. Une interpolation linéaire entre les deux périodes nous a permis d'obtenir le revenu intermédiaire. Le tableau 4.1 indique le revenu moyen estimatif tiré d'une profession, en dollars constants de 1993. On constate que le revenu moyen des 15 groupes de profession est passé de 15 434 \$ à 34 979 \$ entre 1950 et 1980 avant de diminuer à 33 245 \$ en 1985, puis de remonter à 34 251 \$ en 1990. Cette tendance à la hausse du revenu moyen s'assortit d'une inégalité grandissante des revenus. Ainsi, l'écart

Les enfants des familles à haut revenu gagnent-ils un revenu aussi élevé? Ceux des familles défavorisées continueront-ils à vivre dans la pauvreté? Ces importantes questions se rapportent à la mobilité intergénérationnelle du revenu, en d'autres termes la transmission d'un niveau de vie d'une génération à l'autre. Dans ce chapitre, nous déterminerons le degré de mobilité intergénérationnelle du revenu au Canada au cours de la deuxième moitié des années 80 et dans les années 90, et essayerons de voir si la situation a changé avec le temps. À une époque où l'inégalité des revenus grandit en l'espace d'une génération, il est capital de savoir si les chances restent égales dans la vie ou si la polarisation croissante des emplois sur le marché du travail s'aggrave davantage à la génération suivante. L'égalité des chances permet à chacun d'exploiter ses talents et ses ressources, peu importe le milieu familial d'où il est issu. Plus il y a transmission du niveau de vie d'une génération à l'autre, plus inégales sont les chances de réussir dans la vie. Le degré de transmission du niveau de vie entre générations affecte par ricochet l'inégalité des revenus à l'intérieur d'une génération. Ainsi, Becker et Tomes (1986) ont montré que les sommes investies par les parents dans leurs enfants affectent la mobilité du revenu et, par conséquent, l'inégalité des revenus. Le degré de transmission entre générations nous apprend comment une société s'attaque aux problèmes de l'inégalité des revenus et de l'égalité des chances; on peut donc le considérer comme un baromètre socio-économique de la société concernée. Cet aspect revêt aussi une grande importance à l'égard de nombreuses préoccupations en matière de politique publique, notamment le financement de l'éducation par les administrations publiques.

On ne sera guère surpris d'apprendre que maintes études récentes sur l'égalité intergénérationnelle se sont attardées aux deux pays où l'inégalité des revenus au sein d'une même

Choisir le bon ensemble de données est un aspect méthodologique crucial dans les études portant sur la mobilité intergénérationnelle du revenu. L'une des exigences les plus sévères concerne l'information sur les membres de deux générations successives, parvenus approximativement au même point de leur vie. L'Enquête sociale générale (ESG) de Statistique Canada

### 1. Description des données

génération s'est aggravée le plus brutalement, soit les États-Unis (Altonji et Dunn 1991, Solon 1992, Zimmerman 1992, Peters 1992) et le Royaume-Uni (Dearden, Machin et Reed 1997). L'existence de données longitudinales suivant les mêmes sujets pendant une période assez longue est une autre raison pour laquelle on s'est intéressé à ces deux pays. Certaines restrictions au niveau des données ont empêché la poursuite d'études analogues au Canada. Corak et Heisz (1995, 1998) ont néanmoins surmonté récemment la difficulté en recourant aux données fiscales sur près de 450 000 couples pères-fils. Nous examinerons la même question sous un angle différent grâce à la combinaison de données sur le revenu moyen par profession provenant des recensements de 1951 à 1991 (y compris celui de 1986) mises à la disposition du public et de données de l'Enquête sociale générale de 1986 et de 1994. Bien que les données employées diffèrent considérablement, nos résultats se rapprochent de ceux de Corak et Heisz (1995, 1998) et révèlent que le revenu connaît une plus grande mobilité intergénérationnelle au Canada qu'aux É.-U. et au R.-U. Par la même occasion, nous avons remarqué que le niveau de vie se transmet davantage entre pères et filles qu'entre pères et garçons. Enfin, nos estimations indiquent une plus forte mobilité intergénérationnelle du revenu chez les cohortes plus jeunes, comparativement aux cohortes de personnes plus âgées.

- MORISSETTE, R., J. MYLES et G. PICOT (1994). « Earnings Inequality and the Distribution of Working Time in Canada. » *Canadian Business Economics*. Vol. 2, 3-16.
- OCDE (1996). « Growing into Work: Youth and the Labour Market Over the 1980s and the 1990s. » *Employment Outlook*. Paris: Organisation de coopération et de développement économiques.
- WOOD, A. (1994). *North-South Trade, Employment and Inequality*. Oxford: Oxford University Press.



les taux élevés de chômage semblent diminuer la mobilité vers le haut (qui est définie en chiffres réels) chez les petits salariés.

## Bibliographie

BANE, M.J. et D.T. ELLWOOD (1986). « Slipping in and out of Poverty: the Dynamics of Spells. » *Journal of Human Resources*. Vol. 1, 1-23.

BEACH, C.M. et G.A. SLOTSVE (1994). « Polarization of Earnings in the Canadian Labour Market. » *Bell Canada Papers on Economic and Public Policy*. Vol. 2. Kingston: Queen's University, John Deutsch Institute for the Study of Economic Policy.

BETCHERMAN, G. et R. MORISSETTE (1994). « Expériences récentes des jeunes sur le marché du travail au Canada ». Ottawa: Statistique Canada, Direction des études analytiques, document de recherche n° 63.

COX, D.R. (1972). « Regression Models and Life Tables. » *Journal of the Royal Statistical Society*. Vol. 34, Series B, 187-220.

COX, D.R. et D. OAKES (1984). *Analysis of Survival Data*. London: Chapman & Hall.

DAVIDSON, R. et J.G. MACKINNON (1993). *Estimation and Inference in Econometrics*. Oxford: Oxford University Press.

HOSMER, D.W. et S. LEMESHOW (1989). *Applied Logistic Regression*. New York: John Wiley and Sons.

KATZ, L.F. et K.M. MURPHY (1992). « Changes in Relative Wages, 1963-1987: Supply and Demand Factors. » *Quarterly Journal of Economics*. Vol. 107, 35-78.

KIEFER, N. (1988). « Economic Duration Data and Hazard Functions. » *Journal of Economic Literature*. Vol. 26, 646-679.

MORISSETTE, R. (1995). « Pourquoi l'inégalité des gains hebdomadaires a-t-elle augmenté au Canada ? » Ottawa : Statistique Canada, Direction des études analytiques, document de recherche n° 80.

MORISSETTE, R. et C. BÉRUBÉ (1996). « Aspects longitudinaux de l'inégalité des revenus au Canada. » Ottawa : Statistique Canada, Direction des études analytiques, document de recherche n° 94.

de souplesse les probabilités de terminer une période de faible salaire compte tenu que la personne a touché des faibles salaires pendant plusieurs années. Les taux de sortie peuvent croître ou décroître de façon monotone au fil du temps, présenter une forme en U et une forme en U inverse ou encore afficher d'autres tendances non linéaires.

<sup>7</sup> L'analyse repose sur des périodes amorcées par des hommes d'un groupe d'âge donné au début de la période. L'échantillon se compose de périodes de faible salaire qui ont commencé entre 1976 et 1992. L'année 1976 est la première année pour laquelle j'observe le début d'une période, et 1992 est la dernière année pour laquelle je sais si une personne a quitté ou non la distribution des faibles salaires au moment t+1.

<sup>8</sup> Il y a quelques exceptions. Par exemple, si l'on définit les faibles salaires comme étant situés à 13 000 \$ ou moins, la chance de quitter l'extrême inférieure de la distribution des salaires est, chez les hommes de 35 à 50 ans, plus élevée si cette période a duré huit ans que si elle a duré sept ans.

<sup>9</sup> Voici comment se calculent ces probabilités. La variable dépendante est assujettie à trois événements. Elle est égale à 0 si la période n'est pas terminée pendant une année; elle est égale à 1 si une période se termine par un abaissement du travailleur; elle est égale à 2 si une période se termine par une remontée du travailleur. Posons  $b_1$  et  $b_2$  comme les deux vecteurs des coefficients associés au vecteur des variables explicatives  $X$ . La probabilité qu'un travailleur s'enforce est donc égale à :  $\exp(b_1X) / [1 + \exp(b_1X) + \exp(b_2X)]$ . De la même façon, la probabilité qu'il s'élève est égale à :  $\exp(b_2X) / [1 + \exp(b_1X) + \exp(b_2X)]$ . La probabilité qu'une période ne se termine pendant une année donnée est égale à un moins la somme de ces deux dernières probabilités.

<sup>10</sup> Pour évaluer l'impact du cycle économique sur les chances des travailleurs de s'élever dans la distribution des salaires, j'ai recalculé les probabilités mentionnées ci-avant en supposant des taux de chômage de 14 %, 9 % et 6 % pour les hommes de trois groupes d'âge. Pour l'ensemble des groupes d'âge et pour les deux seuils, ces taux de chômage élevés ont conduit à une probabilité plus faible de sortie, de descente et de montée. Par conséquent,

250 \$ ou 500 \$, la plupart des emplois nécessitent la production d'une T4. Cependant, ce n'est peut-être pas toujours le cas si la personne touche un salaire supérieur au seuil hebdomadaire de l'a.-c. (ou si le nombre d'heures qu'elle travaille dans une semaine est plus élevé que le nombre minimal requis), sans que son salaire annuel dépasse 250 \$ ou 500 \$. Ces cas sont susceptibles d'être peu importants.

L'utilisateur utilise une procédure à deux étapes pour obtenir un échantillon uniforme dans le temps. D'abord, tous les emplois dont le salaire annuel est inférieur à 250 \$ en dollars constants de 1975 sont exclus de l'analyse. Les seuils qui en découlent sont les suivants : 250 \$ en 1975, 645 \$ en 1989 et 738 \$ en 1993. On obtient ensuite le salaire annuel en faisant la somme des gains provenant de tous les autres emplois détenus par une personne au cours d'une année donnée. Ainsi, à moins d'indication contraire, la notion de gain qu'on a utilisée désigne les salaires annuels provenant d'emplois qui ont payé au moins 250 \$ en 1975 (dollars constants). Cela signifie que les « travailleurs sans salaire » comprennent non seulement les travailleurs qui n'ont touché aucun salaire pendant l'année de référence, mais aussi ceux dont les salaires proviennent (au total) d'emplois qui payaient moins de 250 \$ par année en dollars constants de 1975. Par « travailleurs sans salaire », il faudrait entendre ici les travailleurs qui n'ont connu aucune période notable d'emploi pendant l'année de référence. En corollaire, notons que la notion des gains utilisée exclut tout salaire provenant d'un travail autonome. Par conséquent, une personne dont les salaires annuels diminuent entre l'année t et l'année t+1 mais qui commence à toucher un revenu d'un travail autonome au cours de l'année t+1 pourrait amorcer une nouvelle période de faible salaire au cours de l'année t+1 même si son revenu d'emploi (c'est-à-dire la somme des traitements et salaires annuels et du revenu d'un emploi autonome) est demeuré inchangé entre les deux années en question. D'une façon plus générale, l'analyse ne tient pas compte de la transition des personnes entre un travail rémunéré et un travail autonome.

## Notes

L'auteur remercie les évaluateurs anonymes pour leurs commentaires sur une version antérieure. Toutefois, les opinions exprimées dans ce document n'engagent que l'auteur et ne devraient en aucun cas être attribuées à Statistique Canada.

- Autrement dit, les salaires annuels réels en 1989 des hommes qui avaient entre 18 et 24 ans en 1984 (et qui avaient donc entre 23 et 29 ans en 1989) étaient inférieurs de 10 % aux salaires touchés en 1980 par les hommes qui avaient entre 18 et 24 ans en 1975 (qui avaient donc entre 23 et 29 ans en 1980).
- Pour ce faire, je procède en deux étapes. D'abord, j'évalue  $p$ , le coefficient d'auto-corrélation, à l'aide de la régression suivante :  $res(i,t) = pres(i,t-1) + v(i,t)$ , où  $res(i,t)$  et  $pres(i,t-1)$  représentent les résidus de l'estimation des moindres carrés de l'équation (3,1) pour l'individu  $i$  au moment  $t-1$ , et  $v(i,t)$  est une erreur aléatoire. En deuxième lieu, je laisse de côté la première observation pour chaque individu, je fais une transformation des données puis une régression de l'équation suivante par les moindres carrés :  $y(i,t) - py(i,t-1) = b_0(1-p) + b_1(X(i,t)-pX(i,t-1)) + b_2(TChôm - pTChôm(i,t-1))$ .
- Une façon de vérifier l'autocorrélation du premier ordre consiste à effectuer une régression des résidus obtenus à partir de la première régression,  $res(i,t)$ , sur  $res(i,t-1)$ , ainsi que sur toutes les variables explicatives utilisées dans la première régression. Si le coefficient qui en résulte pour  $res(i,t-1)$  est significatif, on peut alors rejeter l'hypothèse nulle d'absence d'autocorrélation du premier ordre (Davidson et MacKinnon 1993, 357-58).
- Comme on le sait pertinemment, ni la durée moyenne des nouvelles périodes en cours ni la durée moyenne des nouvelles périodes terminées ne peuvent fournir des estimations non biaisées de la durée réelle des nouvelles périodes de faible salaire.
- Les périodes de faible salaire pour lesquelles nous observons le début commencent en 1976 ou après cette date. Si un travailleur de sexe masculin touche de faibles salaires en 1975, on ne peut déterminer s'il a commencé à toucher un tel salaire cette année-là ou auparavant puisqu'il n'existe aucune donnée antérieure à 1975. De la même façon, les périodes de faible salaire amorcées en 1993 ne peuvent faire partie de l'analyse, car on ne sait pas si ces périodes se sont terminées ou non l'année suivante. Pour cette raison, l'analyse repose sur les périodes qui ont commencé entre 1976 et 1992.
- Neuf variables nominales de la durée des périodes sont incluses. L'utilisation d'un ensemble de variables nominales de la durée des périodes nous permet de préciser avec beaucoup



En termes **absolus**, les taux d'emploi, de chômage et de sous-emploi chez les jeunes hommes sont maintenant pires qu'avant la récession de 1990-1992 ou même qu'il y a vingt ans. Parce que les résultats de l'emploi chez les travailleurs âgés se sont aussi détériorés pendant la période en question, les jeunes hommes, **comparativement** à leurs homologues plus âgés, ne sont pas dans une pire situation qu'il y a vingt ans.

C'est différent dans le cas des salaires. En effet, depuis 1981, les salaires horaires et les salaires annuels des jeunes hommes, tant en chiffres réels que par rapport à ceux de salariés plus âgés, ont diminué considérablement. Le fait que le profil âge-salaires des cohortes récentes de jeunes hommes se soit détérioré par rapport à celui des cohortes précédentes (même après avoir éliminé les effets cycliques) laisse entendre que la diminution des salaires chez les jeunes a eu des effets à long terme. À tout le moins, les salaires accumulés par les jeunes hommes au cours d'une période de dix ans ont été touchés.

Même après avoir contrôlé à la fois les effets cycliques et toute diminution des salaires réels, les jeunes hommes semblent prendre plus de temps à s'élever dans l'échelle de la distribution des salaires que ce n'était le cas au milieu des années 1970. Cette situation pourrait s'expliquer par la croissance du nombre d'étudiants qui combinent études et travail à temps partiel, les problèmes accrus (possiblement) éprouvés par les jeunes à décrocher des emplois permanents bien rémunérés, le manque de compétences appropriées chez certains jeunes moins instruits et enfin une hétérogénéité non observée.

Prises ensemble, ces conclusions soulèvent au moins deux questions. D'abord, quels facteurs ont conduit à ce fléchissement des salaires chez les jeunes? Malgré leur augmentation rapide, les études sur l'inégalité des salaires n'ont pas encore fourni de réponses satisfaisantes. Une des principales explications, à savoir l'hypothèse du changement technologique axé sur les compétences, peut difficilement être reliée à la notion que les jeunes travailleurs sont plus susceptibles que tous les autres de pouvoir travailler avec les nouveaux procédés et les récentes technologies. En deuxième lieu, la dégradation du profil âge-salaires chez les récentes cohortes de jeunes travailleurs se traduira-t-elle

par une diminution des salaires qu'ils toucheront pendant leur vie ou sera-t-elle compensée à la longue par une croissance rapide des salaires dans les années à venir? Peu importe les réponses qu'on obtiendra, les jeunes Canadiens d'aujourd'hui font face à un marché du travail fort différent de celui qu'ont affronté leurs homologues de la génération précédente.

Annexe

Le fichier des formules T4 Supplémentaire (T4S) pour les années 1975 à 1993 représente le principal ensemble de données que nous avons utilisé. L'échantillon de l'analyse repose sur 1 % de tous les enregistrements des déclarations de particuliers reçues à Revenu Canada. Plus précisément, il se compose de 1 % des particuliers qui ont reçu une formule T4S et qui ont produit une déclaration T1 dans **au moins une année** entre 1975 et 1993. Le fichier a été confectionné en combinant les T4S des employeurs et les enregistrements T1.

Les employeurs doivent remplir une T4 Supplémentaire dans les cas suivants : l'impôt sur le revenu, les cotisations au Régime de pensions du Canada/Régime des rentes du Québec (RPC/RRQ) ou les cotisations à l'assurance-chômage (a.-c.) doivent être retenus sur la paie d'un salarié; les salaires annuels d'un salarié dépassent un certain seuil. Ce seuil s'établissait à 250 \$ entre 1975 et 1988, et à 500 \$ par la suite. Il est nécessaire de retenir de l'impôt sur le revenu chaque fois que le **revenu** annuel du salarié (salaires annuels plus revenu tiré d'autres sources, comme les intérêts et les dividendes) dépasse son exemption personnelle. Dans la plupart des cas, le salaire annuel sous-jacent devrait être supérieur aux seuils de 250 \$ ou 500 \$. Il faut aussi retenir les cotisations au RPC/RRQ chaque fois que le salaire annuel d'un salarié dépasse l'exemption annuelle de base (EAB). L'EAB correspond en gros à 10 % du salaire annuel moyen dans la branche d'activité et il dépasse donc les seuils de 250 \$ et 500 \$. Il faut retenir de la paie d'un salarié les cotisations à l'a.-c. chaque fois que le nombre d'heures hebdomadaires de travail de cette personne dépasse un certain seuil (15 heures en 1993) ou que son salaire dépasse un montant hebdomadaire déterminé (149 \$ en 1993).

Étant donné que les seuils associés à l'impôt sur le revenu (l'exemption personnelle) ou aux cotisations du RPC/RRQ (l'EAB) dépassent



Tableau 3.10  
Probabilités d'échapper à de faibles salaires selon la durée  
de la période et le type de sortie

Année	1976-84	1985-92	1976-84	1985-92	1976-84	1985-92
	Probabilité de salaires nuls		Probabilité de salaires supérieurs		Probabilité totale d'échapper	

A. Périodes de faible salaire débutées par des hommes ayant entre 18 et 24 ans au début de la période					
pourcentage					
1	13,9	13,0	18,7	15,5	32,5
2	13,5	12,6	15,7	12,9	29,2
3	12,0	11,2	14,4	11,8	26,5
4	11,6	10,8	13,4	11,0	25,1
5	12,0	11,1	13,6	11,2	25,6
6	10,5	9,7	13,0	10,6	23,5
7	11,5	10,6	10,8	8,8	22,2
8	10,1	9,3	10,8	8,7	20,9
9	11,1	10,2	10,5	8,5	21,6
10 ou plus	11,3	10,3	7,4	5,9	18,6

B. Périodes de faible salaire débutées par des hommes ayant entre 25 et 34 ans au début de la période					
pourcentage					
1	20,6	20,3	27,3	25,4	47,9
2	17,7	17,3	21,7	20,0	39,4
3	16,2	15,8	17,8	16,4	34,1
4	15,6	15,1	15,3	14,0	30,8
5	14,1	13,6	12,8	11,7	26,9
6	13,4	13,0	12,0	10,9	25,5
7	12,7	12,2	10,7	9,7	23,4
8	13,7	13,2	9,4	8,5	23,1
9	13,6	13,0	7,4	6,7	21,0
10 ou plus	11,2	10,7	6,1	5,5	17,3

C. Périodes de faible salaire débutées par des hommes ayant entre 35 et 50 ans au début de la période					
pourcentage					
1	23,2	23,2	27,7	27,7	50,9
2	19,3	19,3	20,9	20,9	40,2
3	16,7	16,7	14,3	14,3	31,1
4	15,4	15,4	12,2	12,2	27,6
5	13,3	13,3	11,0	11,0	24,3
6	13,5	13,5	9,1	9,1	22,5
7	12,0	12,0	8,3	8,3	20,2
8	11,0	11,0	7,4	7,4	18,3
9	11,6	11,6	5,2	5,2	16,8
10 ou plus	11,2	11,2	4,4	4,4	15,6

Nota : Le faible salaire est fixé à moins de 21 073 \$ (dollars constants de 1993). Les données présentées dans ce tableau supposent un taux de chômage de 10 %, 6 % et 4 % pour les hommes âgés de 18 à 24, 25 à 34 et 35 à 50 ans, respectivement. Chez les hommes âgés de 35 à 50 ans, les probabilités sont les mêmes pour les deux périodes parce que la variable nominale qui est égale à 1 en 1985 et par la suite n'est pas statistiquement significative au niveau de 5 %.

Alors, il est possible qu'un pourcentage plus élevé de jeunes touchent de faibles salaires pendant une longue période simplement parce qu'ils sont plus nombreux à combiner travail à temps partiel et études.

Une deuxième explication vient du fait que les jeunes hommes qui ont déjà fait la transition entre l'école et le travail ont peut-être maintenu plus de difficultés à décrocher des emplois permanents bien rémunérés que ce n'était le cas chez leurs homologues dans les années 1970. Comme l'indique le tableau 3.5, beaucoup de jeunes travailleurs qui ont quitté l'école se retrouvent maintenant malgré eux dans un emploi à temps partiel ou dans un emploi temporaire. Cela pourrait se répercuter sur la rapidité avec laquelle ils s'élèveront dans l'échelle de distribution des salaires réels.

On pourrait aussi expliquer la situation si une partie des travailleurs de moins de 35 ans ne possédaient pas les compétences ni la scolarité demandées sur le marché du travail. Vu que les T4S ne renseignent aucune donnée sur la fréquentation scolaire ou les niveaux d'études, il est impossible de distinguer la contribution relative de chacun de ces facteurs. Le fait que le taux de chômage chez les jeunes travailleurs moins instruits ait augmenté dans les années 1980 rejoint cette opinion. Entre 1981 et 1989, le rapport du taux de chômage des personnes comptant au maximum huit années de scolarité aux diplômés d'université est passé de 3,0 à 3,9 chez les personnes de 15 à 24 ans et de 3,3 à 3,7 chez celles de 25 à 34 ans.

Une quatrième explication est la possibilité qu'une hétérogénéité non observée explique une partie de la diminution dans la mobilité ascendante chez les jeunes. Plus précisément, si les périodes de faible salaire dans les années 1980 sont davantage concentrées chez les travailleurs peu spécialisés (chez qui ont attendu des taux de sortie peu élevés) qu'elles ne l'étaient au milieu des années 1970, les taux de sortie peuvent avoir diminué à cause de cet effet de composition. Dès lors, il faudrait interpréter avec prudence la diminution de la mobilité ascendante chez les jeunes travailleurs. Celle-ci pourrait refléter à la fois une diminution réelle des taux de sortie pour tous les types de travailleurs, ou encore une concentration accrue de périodes de faible salaire chez les travailleurs peu spécialisés (sans qu'il y ait variation des taux de sortie particuliers à chaque groupe).

de sortie observé au niveau agrégé pourrait provenir de ce mélange de probabilités de sortie par

particuliers à un groupe.

Pour illustrer notre propos, nous présentons au tableau 3.10 la probabilité qu'un travailleur de s'échapper de l'extrême inférieure de la distribution des salaires l'année suivante, compte tenu qu'il a touché de faibles salaires pendant un certain nombre d'années. Cette probabilité correspond à la somme de la probabilité de s'enfoncer (c'est-à-dire de ne toucher aucun salaire l'année suivante) et de la probabilité de s'élérer (c'est-à-dire de recevoir des salaires élevés l'année suivante). On offre également des estimations de ces deux probabilités<sup>9</sup>. On calcule les chiffres en supposant un taux de chômage de 10 %, 6 % et 4 % chez les travailleurs masculins de 18 à 24, de 25 à 34 et de 35 à 50 ans respectivement<sup>10</sup>. De plus, ils reposent sur l'écart moyen (qu'on définit pour chaque groupe d'âge) entre les salaires des travailleurs et le seuil de faible salaire.

Comme l'indique le tableau 3.10, la probabilité de se sortir d'une situation de faible salaire a légèrement diminué chez les travailleurs de moins de 35 ans. Chez ces salariés, les probabilités inférieures de sortie sont principalement attribuables à une diminution des chances de s'élérer dans la distribution des salaires. Par exemple, chez les hommes de 18 à 24 ans, la probabilité de s'élérer après avoir touché moins de 21 000 \$ pendant deux années passe de 16 % en 1976-1984 à 13 % en 1985-1992. Cette probabilité diminue de 22 % à 20 % chez les hommes de 25 à 34 ans puis reste stable à 21 % chez les hommes de 35 à 50 ans, laissant supposer qu'il n'y a aucune baisse de la mobilité ascendante chez les travailleurs âgés. Les résultats qu'on ne voit pas ici indiquent que ces conclusions qualitatives demeurent vraies lorsqu'on tient compte du seuil de salaire de 13 000 \$.

Par conséquent, même après avoir éliminé les effets cycliques et toute diminution des salaires réels, la durée des périodes de faible salaire semble avoir augmenté dans les années 1980 chez les jeunes travailleurs. Pourquoi les jeunes travailleurs prennent-ils maintenant plus de temps pour s'élérer dans l'échelle de distribution des salaires que ce n'était le cas auparavant? On pourrait supposer que de plus en plus de jeunes personnes travaillent à temps partiel pendant qu'ils fréquentent l'école à plein temps. (Le pourcentage des personnes de 18 à 24 ans qui travaillaient tout en fréquentant l'école est

à temps partiel ou contractuel, surtout chez les jeunes travailleurs. Si c'était le cas, le taux potentiel de croissance des salaires chez les jeunes pourrait diminuer et, partant, la mobilité ascendante des jeunes aurait pu fléchir.

On utilise un modèle **logit multinomial** étant donné que les périodes de faible salaire peuvent se terminer de deux façons différentes : un travailleur peut arrêter de toucher des salaires ou il peut commencer à toucher des salaires plus élevés que 13 000 \$ ou 21 000 \$ l'année suivante (Hosmer et Lemeshow 1989). Puisque la mobilité des salaires est susceptible de varier selon le groupe d'âge, on procède à une estimation distincte du modèle pour les trois groupes d'âge suivants qui sont définis au début de la période : de 18 à 24 ans; de 25 à 34 ans; et de 35 à 50 ans. On fait aussi l'estimation du modèle pour chacun des deux seuils, à savoir 13 000 \$ et 21 000 \$. La variable dépendante est égale à : 0 si un travailleur demeure dans la distribution des faibles salaires au moment  $t+1$ ; 1 si ce travailleur ne reçoit plus de salaires au moment  $t+1$ , et 2 s'il commence à toucher des salaires supérieurs l'année suivante au moment  $t+1$ . (On peut se procurer sur demande, en annexe à ce chapitre, les résultats détaillés de l'estimation.)

Deux faits ressortent en ce qui concerne les travailleurs de moins de 35 ans, quel que soit le seuil utilisé. D'abord, une fois les effets cycliques contrôlés, les chances de quitter une situation de faible salaire sont légèrement moins élevées à partir de 1985 qu'avant cette année-là. En deuxième lieu, plus un travailleur touche de faibles salaires pendant une longue période, plus faibles sont les chances qu'il termine une telle période<sup>8</sup>. On ne sait trop pourquoi. Au moins deux explications sont possibles (Bane et Ellwood 1986). Dans un premier temps, compte tenu de caractéristiques observables et non observables, il peut être plus difficile pour des travailleurs de s'extraire d'une situation de faible salaire à mesure que le temps file. Une longue période de faible salaire pourrait rendre encore plus difficile pour un travailleur la tâche de décrocher un emploi bien rémunéré qui lui permettrait de s'élever dans l'échelle de distribution des salaires. Il est également possible que les travailleurs représentent un groupe hétérogène eu égard à leurs aptitudes non observées. Certains travailleurs peuvent afficher un taux de sortie faible et constant, tandis que d'autres peuvent avoir un taux de sortie élevé et constant. À mesure que le temps s'écoule, les premiers représentent un pourcentage plus nombreux des

est utilisé. Plus précisément, un modèle logit est estimé pour évaluer la probabilité qu'une période se termine au cours d'une année donnée.

Pour évaluer la probabilité qu'un individu quitte la distribution des faibles salaires au moment  $t+1$ , on construit un ensemble de données dont l'unité d'observation est une année-période de faible salaire. En d'autres termes, si une période de faible salaire dure sept ans, il y aura sept observations associées à cette période dans l'ensemble de données. Chaque année-période comprend les variables explicatives suivantes : le chômage régional (spécifique à chaque groupe d'âge) au moment  $t$ ; l'écart entre les salaires des travailleurs au moment  $t$  et le seuil servant à définir les faibles salaires; un ensemble de variables nominales de la durée des périodes; et une variable nominale égale à 1 à partir de 1985, sinon la variable est égale à 0. Les variables nominales régionales permettent aux taux de sortie (la chance de terminer une période de faible salaire compte tenu qu'on y est resté pendant plusieurs années) de varier d'une région à l'autre. Cela peut se produire si les régions ont une structure industrielle différente. Dans ce cas, les occasions de passer d'une branche à faible salaire à une branche à salaire élevé—et donc le degré de mobilité vers le haut—peut varier également d'une région à l'autre.

On utilise le taux de chômage spécifique à l'âge/région pour contrôler les effets des cycles économiques. L'écart entre les salaires des travailleurs au moment  $t$  et le seuil de faible salaire nous permet de mesurer le taux de mobilité qui est conditionnel aux salaires des travailleurs. L'ensemble de variables nominales de la durée des périodes sert à évaluer la pente des taux de sortie<sup>9</sup>. Je vérifie également si les chances des travailleurs de quitter la distribution des faibles salaires (après avoir contrôlé les effets cycliques et les variations des salaires réels) sont plus faibles pendant la deuxième moitié de la période 1975-1993 que durant la première moitié, incluant une variable nominale égale à 1 en 1985 et à 0 par la suite. L'utilisation de cette variable repose sur l'hypothèse que la période d'expansion de la deuxième moitié des années 1980 était, d'une certaine façon, différente des périodes d'expansion qui précédaient. Plus précisément, il est possible que la concurrence accrue engendrée par la croissance du commerce international et les changements technologiques ait amené les entreprises à gérer leur effectif avec plus de souplesse. Il est également possible que les entreprises aient augmenté leur personnel temporaire,



Tableau 3.9

# Fraction des périodes de faible salaire d'une durée au moins égale au nombre d'années en question

Année au cours de laquelle une période de faible salaire a commencé

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
<b>A. Faibles salaires définis comme étant 13 509 \$ en dollars de 1993</b>																	
2 ans	39,1	41,0	39,0	40,2	40,3	45,4	46,9	46,8	47,3	47,7	44,4	45,0	44,1	44,2	45,9	45,8	45,2
3 ans	19,2	19,0	20,1	20,5	21,4	25,9	24,5	25,9	26,7	26,2	24,1	24,2	23,0	24,6	25,0	24,4	
4 ans	10,1	11,0	11,1	11,4	12,8	15,3	14,4	15,3	16,1	14,9	14,2	13,9	14,1	14,1	15,2		
5 ans	6,0	6,9	7,1	7,5	8,3	9,2	8,9	9,1	10,2	9,1	8,6	8,1	8,8	9,0			
6 ans	3,9	4,3	4,9	5,2	5,0	5,6	5,6	5,7	6,6	5,3	5,4	5,5					
7 ans	2,5	3,2	3,4	3,8	3,5	3,9	3,6	3,7	4,2	3,7	3,6	3,7					
8 ans	1,6	2,4	2,6	2,5	2,4	2,7	2,5	2,6	2,9	2,6	2,4						
9 ans	1,1	1,6	1,9	1,8	1,7	2,1	1,8	1,9	2,0								
10 ans	1,0	1,4	1,4	1,3	1,2	1,7	1,3	1,5	1,6	1,9							
Nombre de périodes	3 775	4 129	4 280	4 087	4 452	4 659	5 667	5 976	5 446	5 269	5 365	5 272	5 147	5 272	5 674	6 323	6 062
<b>B. Faibles salaires définis comme étant moins de 21 073 \$ en dollars de 1993</b>																	
2 ans	48,4	49,7	48,8	51,2	50,8	55,7	55,8	56,4	57,0	57,8	56,4	56,3	54,0	53,7	57,0	54,0	53,9
3 ans	28,3	28,6	28,6	31,7	32,3	36,7	34,0	36,3	37,7	37,6	35,4	34,9	33,8	34,9	36,7	33,3	
4 ans	18,1	18,8	18,6	21,0	23,0	25,8	23,0	24,9	26,4	25,5	24,4	24,0	23,7	23,3	25,9		
5 ans	12,3	13,5	12,0	15,1	17,0	18,5	16,0	17,8	19,2	18,4	17,3	16,9	16,9	16,6			
6 ans	8,9	9,5	8,6	11,3	12,6	13,2	11,3	12,5	14,0	13,2	12,5	12,9	12,6				
7 ans	6,7	7,6	6,5	8,5	9,1	9,4	8,3	9,0	10,8	10,0	9,1						
8 ans	5,3	5,7	5,4	6,5	7,0	6,8	6,3	6,6	8,4	7,6	6,9						
9 ans	4,3	4,6	4,1	4,9	5,4	4,9	4,8	5,2	6,5	6,0							
10 ans	3,4	3,8	3,3	3,9	4,2	3,8	3,8	4,0	5,1								
Nombre de périodes	4 201	4 692	4 841	4 693	5 109	5 218	6 206	6 375	5 721	5 608	5 652	5 620	5 487	5 762	6 127	6 614	6 182

**Nota :** Les inscriptions dans le tableau désignent les nouvelles périodes de faible salaire chez les travailleurs masculins qui avaient entre 18 et 50 ans au début de la période. Sont incluses les périodes incomplètes et les périodes terminées.

qu'ils ne réussissent pas à rattraper l'écart même après 10 ans.

Une question connexe consiste à savoir si la chance de ces travailleurs de s'élever

au-dessus de la zone de faibles salaires réels a changé dans les années 1980 **après** avoir tenu compte à la fois des effets cycliques et d'une diminution de salaires. Autrement dit, si l'on fait abstraction des effets cycliques et des fluctuations des salaires réels, il est possible que la durée des périodes de faible salaire qu'ont connues les jeunes travailleurs ait augmenté au cours de la dernière décennie. Cela serait possible si les nouvelles pratiques d'embauche des entreprises (en raison d'une concurrence accrue et/ou de changements technologiques) ont eu pour effet d'emprisonner un plus grand nombre de jeunes gens dans des emplois non permanents n'offrant à peu près aucune perspective de progression professionnelle, réduisant ainsi la vitesse à laquelle ils auraient pu accéder aux différents seuils de salaires.

Pour examiner cette question, on doit d'abord définir ce qu'on entend par un seuil de faible salaire. Étant donné que toute définition est arbitraire, nous avons choisi deux seuils pour mesurer les transitions à la base de la distribution des salaires. Le premier est établi à 13 509 \$ (en dollars de 1993) et il se situe près du seuil de faible revenu (SFR) de Statistique Canada pour un adulte habitant une région urbaine de moins de 30 000 habitants (13 063 \$)). Le deuxième seuil est fixé à 21 073 \$ (en dollars de 1993) et il se rapproche du SFR pour une famille de deux personnes habitant une région urbaine comptant au moins un demi-million d'habitants (20 603 \$). Pour des raisons de simplicité, nous utiliserons les chiffres de 13 000 \$ et 21 000 \$ respectivement, pour distinguer ces deux seuils.

Il est bien connu que le pourcentage de travailleurs masculins qui touchent un faible salaire a augmenté pendant les années 1980. L'importance relative des petits salaires s'est accrue dans tous les groupes d'âge, surtout chez les hommes de moins de 35 ans. Par exemple, Morissette et Bérubé (1996) révèlent que 23 % des salariés masculins de 25 à 34 ans ont touché moins de 21 000 \$ en 1975, comparative-

ment à 40 % en 1993. Pour savoir si la durée des périodes de faible salaire amorcées par les jeunes hommes entre 1976 et 1992, qui ont duré **au moins**

2 ans, 3 ans, 4 ans et ainsi de suite<sup>4,5</sup>. On définit une période de faible salaire comme celle où un travailleur commence à toucher des salaires **positifs** inférieurs à 13 000 \$ ou à 21 000 \$. La période se termine soit lorsque le travailleur ne touche plus de salaires **l'année suivante**, soit lorsqu'il commence à toucher des salaires plus élevés **l'année suivante**. La période est censurée en aval (c'est-à-dire qu'elle est incomplète) si un travailleur touche toujours moins de 13 000 \$ ou 21 000 \$ en 1993, dernière année pour laquelle nous disposons de données.

Le tableau 3.9 présente les résultats de cet exercice. De tous les hommes qui ont commencé à toucher moins de 13 000 \$ (21 000 \$) au cours d'une année particulière, près de 40 % (50 %) n'ont pas bougé de ce niveau pendant au moins deux ans. Un examen rapide du tableau nous révèle que les risques de demeurer au bas de la distribution des salaires pour un nombre particulier d'années sont influencés par la conjoncture macroéconomique. Aussi, pour savoir si les périodes de faible salaire ont duré plus longtemps dans les années 1980 que dans les années 1970, nous devons contrôler les effets des cycles écono-

nomiques.

La durée d'une période de faible salaire dépendra vraisemblablement non seulement des conditions macroéconomiques qui prévalaient au **début** de la période, mais également de celles qui existeront **après** le début de cette période. Elle devrait aussi dépendre des salaires réels des travailleurs au moment t. Toutes choses étant égales par ailleurs, plus l'écart entre les salaires réels du travailleur et le seuil servant à définir le faible salaire est grand, moins un travailleur aura de chances de s'extirper de sa situation inférieure au moment t+1. On a besoin d'un cadre empirique renfermant des variables temporelles pour tenir compte de ces questions. Même si l'on pouvait observer la fin de toutes les périodes, une analyse de régression conventionnelle (utilisation des modèles carrés pour modéliser la durée des périodes de faible salaire en fonction de certaines variables explicatives) ne parviendrait pas à régler ce problème. Pour intégrer des variables temporelles, nous avons besoin d'un modèle de durée (Kiefer, 1988).

Étant donné que l'unité de temps utilisée pour analyser les périodes de faible salaire est longue (un an) par rapport à la période totale des observations (19 ans pour la période de 1975 à 1993) et vu que les périodes de faible salaire ne peuvent débuter n'importe quand, un modèle de durée basé sur une analyse temporelle discrète

Graphique 3.5  
Profil estimé âge-salaires de la cohorte de 1983  
par rapport à celui de la cohorte de 1975

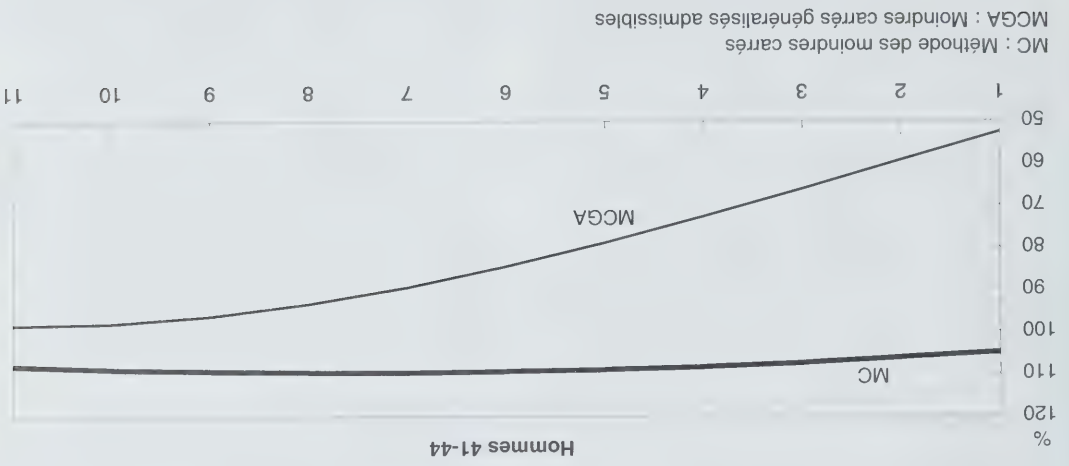
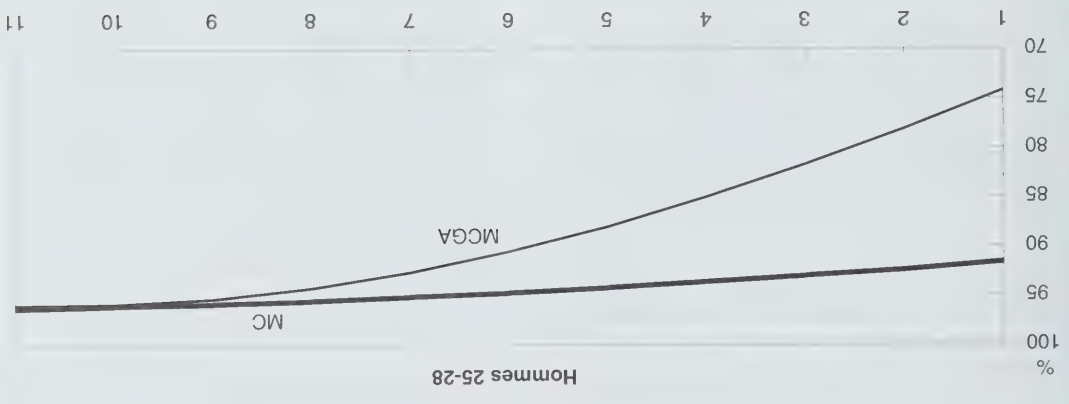
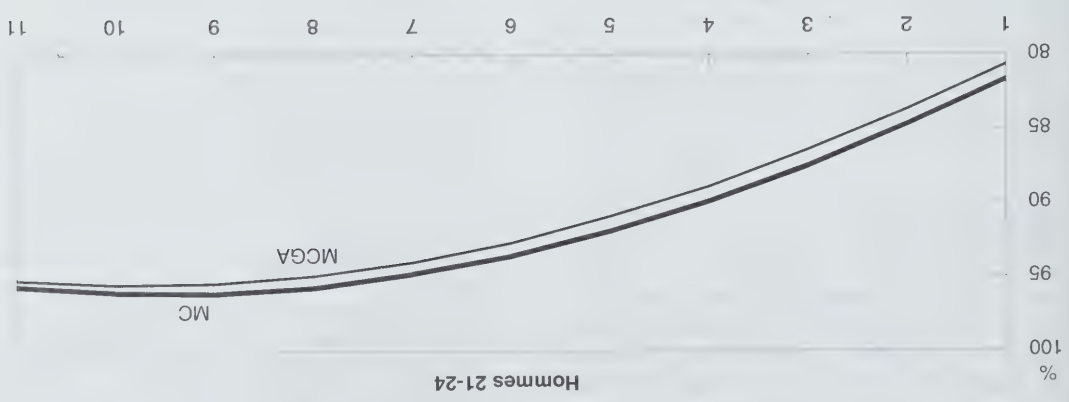




Tableau 3.8  
Résultats de régression des données longitudinales

Coefficients choisis	Hommes de 21 à 24 ans		Hommes de 25 à 28 ans		Hommes de 41 à 44 ans	
	Moindres carrés	MCGA	Moindres carrés	MCGA	Moindres carrés	MCGA

Age	0,356	0,114	0,205	-0,111	0,089	-0,286
Age au carré/(100)	(26,07)	(2,79)	(14,35)	(2,28)	(3,13)	(2,22)
	-0,537	-0,149	-0,277	0,165	-0,097	0,250
	(21,53)	(2,21)	(12,20)	(2,36)	(3,23)	(2,04)
Cohorte83	-2,15	-2,14	-0,519	-3,6	-2,49	-17,33
	(8,21)	(2,49)	(1,65)	(3,05)	(2,68)	(3,73)
Cohorte83 x Age	0,139	0,136	0,025	0,2	0,107	0,668
	(7,25)	(2,40)	(1,25)	(2,95)	(2,74)	(3,80)
	-0,228	-0,222	-0,033	-0,282	-0,111	-0,644
	(6,59)	(2,36)	(1,03)	(2,88)	(2,70)	(3,85)
Taux de chômage	-0,027	-0,025	-0,021	-0,019	-0,015	-0,014
	(25,93)	(24,57)	(22,25)	(21,24)	(12,45)	(13,65)
	0,681	(377,48)		0,728		0,822
	(414,29)			(414,29)		(404,04)
Taille de l'échantillon	172 040	156 400	169 620	154 200	100 529	91 390

\* La variable dépendante est le logarithme naturel des salaires annuels réels. L'ensemble complet des variables explicatives est le suivant : une coordonnée à l'origine; quatre variables nominales régionales; taux de chômage régional chez les hommes de 24 à 54 ans; deux variables nominales pour les cohortes de 1983 et 1979 (la cohorte de 1975 est la catégorie omise); âge; âge au carré; quatre termes d'interaction entre les variables nominales des cohortes et le terme quadratique de l'âge. Le modèle est estimé à la fois au moyen des moindres carrés généralisés admissibles (MCGA), en supposant une corrélation propre du premier ordre. Le coefficient pour rho est obtenu par régression de  $\text{res}(i,t) = \rho \cdot \text{res}(i,t-1) + v(i,t)$ , où  $\text{res}(i,t)$  et  $\text{res}(i,t-1)$  sont les valeurs résiduelles (des moindres carrés) pour la personne i au moment t et  $v(i,t)$  est une erreur de bruit blanc. Les statistiques t sont entre parenthèses. La taille de l'échantillon est égale à N fois T, où N fois T, ou N est le nombre de personnes et T est le nombre de périodes dans l'échantillon constant. Pour cet échantillon, T = 11. Lorsqu'on utilise les MCGA, la première observation est éliminée pour chaque personne. Dans ce cas, la taille de l'échantillon est N fois T-1.

Source : Fichiers des T4 Supplémentaire de Revenu Canada.

varient plus que les coefficients d'autres variables explicatives (le taux de chômage et les variables nominales régionales) cadre bien avec cette hypothèse.

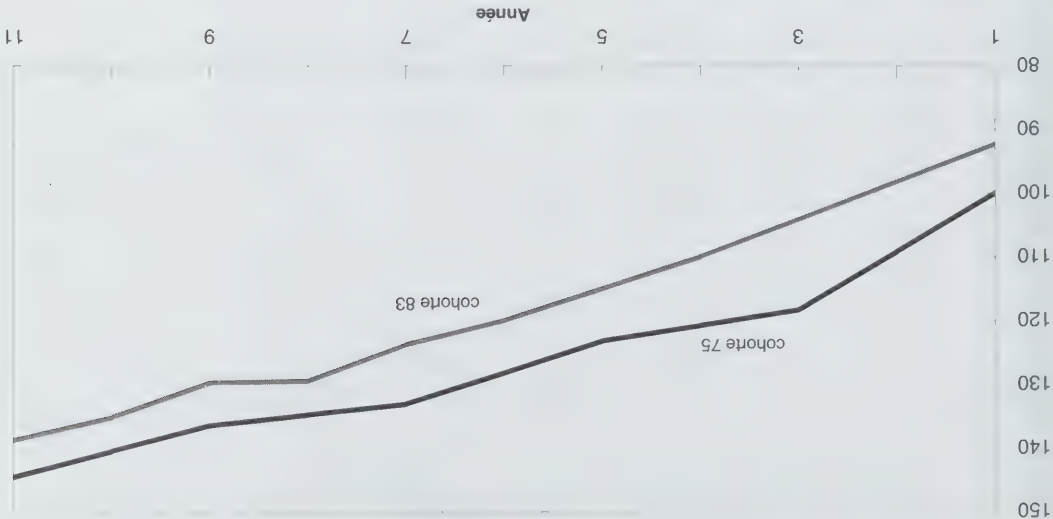
Quoi qu'il en soit, même si l'on obtient des résultats mixtes (pour ce qui est de l'estimation du profil âge-salaires de la cohorte de 1983 par rapport à celui de la cohorte de 1975) en ce qui concerne les hommes de 25 à 28 ans et les hommes de 41 à 44 ans, les données brutes et les résultats de la régression par les MC et les MCGA font ressortir (pour les hommes âgés de 21 à 24 ans) une tendance à la baisse dans le profil âge-salaires de la cohorte pour 1983 par rapport à celui de la cohorte pour 1975, même après avoir éliminé les effets cycliques. Lorsqu'on procède à une estimation des salaires à partir des coefficients MC, on remarque que les hommes âgés de 24 ans en 1983 ont subi une perte de salaires cumulée de 16 430 \$ (en dollars constants de 1989) au cours d'une période de 11 ans

#### 4. Mobilité vers des salaires élevés

comparativement aux hommes âgés de 24 ans en 1975. (Ajoutons que l'estimation des salaires à partir des coefficients MC laisse entendre que les hommes âgés de 24 ans en 1983 touchaient 16 923 \$, tandis qu'en 1975, les hommes du même âge gagnaient 19 278 \$.) Par conséquent, les effets à long terme du fléchissement des salaires réels chez les jeunes (du moins chez les 21 à 24 ans) semblent loin d'être négligeables.

La baisse des salaires réels chez les jeunes sur une base transversale et le déplacement vers le bas du profil âge-salaires indiquent que les jeunes travailleurs d'aujourd'hui toucheront une rémunération faible pour une plus grande partie de leur carrière que ce ne fut le cas pour leurs homologues au milieu des années 1970. La raison pourrait simplement être qu'ils commencent à travailler à des salaires moindres et

Graphique 3.4  
Salaires réels de cohortes synthétiques d'hommes travaillant à temps plein toute l'année (ayant entre 21 et 24 ans au début de la période)



Source : Enquête sur les finances des consommateurs.

même individu (aucune autocorrélation). Les trois hypothèses nous permettent d'utiliser les moindres carrés (MC). L'admet ensuite une autocorrélation du premier ordre puis je réévalue le modèle à l'aide des moindres carrés généralisés admissibles (MCGA)<sup>2</sup>. Le tableau 3.8 présente les résultats de régression pour les coefficients choisis à l'aide des moindres carrés et le chômage. La variable nominale pour la cohorte de 1983 et les termes d'interaction entre la variable nominale de la cohorte et le terme quadratique de l'âge sont significatifs, indiquant par là que le profil âge-salaires de la cohorte de 1983 est effectivement différent de celui de la cohorte de 1975. Pour évaluer cet écart, nous portons sur le graphique le profil âge-salaires qu'on aurait observé si le taux de chômage avait été le même chez les deux cohortes.

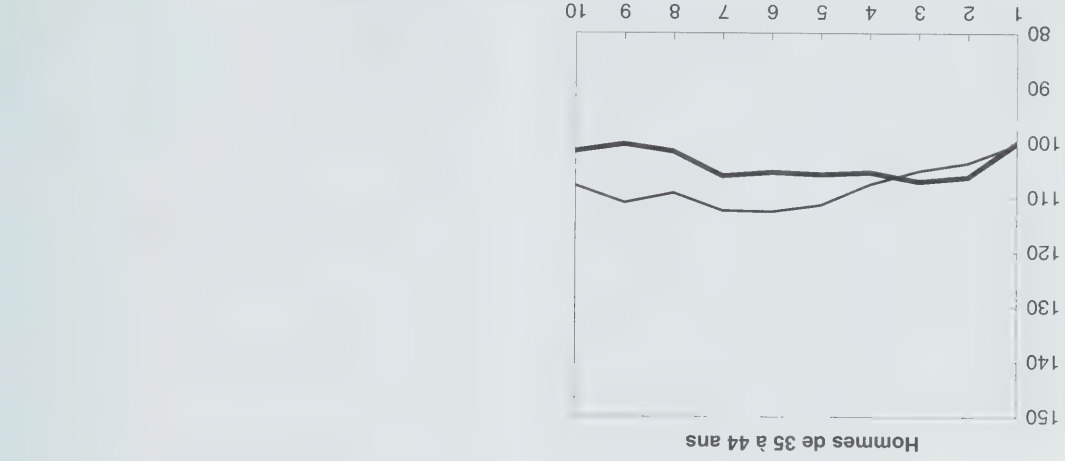
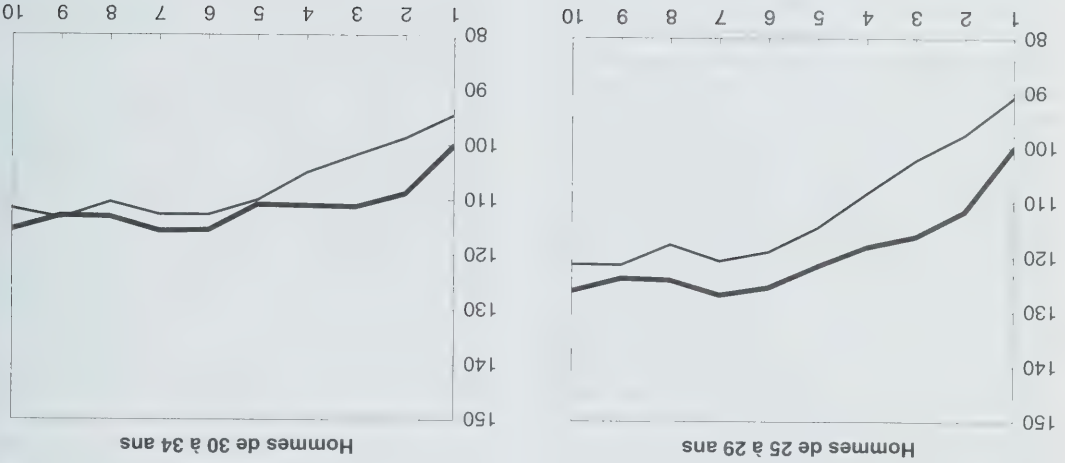
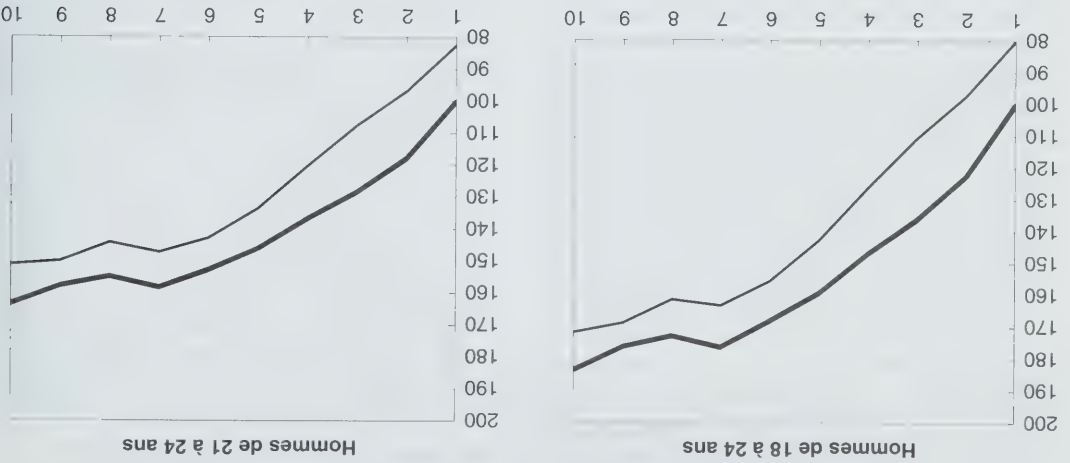
Le premier volet du graphique 3.5 nous indique que même si les taux de chômage avaient été identiques pour les deux cohortes, les salaires réels de la cohorte de 1983 auraient quand même commencé à un niveau beaucoup moins élevé que ceux de la cohorte de 1975, ils se seraient rapprochés de ceux de la cohorte de 1975 à mesure que les travailleurs auraient vieilli, mais ils seraient demeurés dans l'ensemble de 5 % moins élevés même après une période de

dix ans sur le marché du travail. Ceci suggère que les salaires permanents des jeunes ont diminué.

Cet exercice est répété pour les cohortes de naissance sur quatre ans d'hommes ayant entre 25 et 28 ans et entre 41 et 44 ans; les résultats sont présentés au tableau 3.8 ainsi qu'aux deuxième et troisième volets du graphique 3.5. Contrairement à ce qu'on avait trouvé pour les hommes de 21 à 24 ans, les moindres carrés et les MCGA affichent des résultats fort différents. Plus particulièrement, les coefficients de la cohorte83 et les deux termes d'interaction changent radicalement lorsqu'on applique une correction pour l'autocorrélation du premier ordre.

Pourquoi ces coefficients varient-ils tellement? En premier lieu, il est possible que les effets des cohortes soient difficiles à déceler dès qu'on commence à corriger l'autocorrélation du premier ordre. Si  $p=1$  et qu'on transforme les données et applique les moindres carrés généralisés, on ne pourrait pas identifier les effets de la cohorte (en niveaux). Il est possible que même si  $p$  égale seulement 0,73 dans nos modèles, nous commençons à ne pas pouvoir identifier les effets des cohortes lorsqu'on applique la correction aux valeurs résiduelles autocorrélées. Le fait que les coefficients des effets de la cohorte

Graphique 3.3  
Evolution des salaires réels chez les hommes entre 1975 et 1984  
et entre 1984 et 1993



**Nota :** La ligne grasse (mince) révèle le montant des salaires annuels réels que les travailleurs âgés de x-y en 1975 (1984) ont touché pendant la période de 1975-1984 (1984-1993). Les salaires annuels réels sont exprimés par rapport à ceux que les travailleurs âgés de x-y en 1975 ont touchés cette année-là.

Source : Données T4.



Salaires annuels réels accumulés sur une période de 10 ans  
par les travailleurs masculins rémunérés, 1975 à 1984 et 1984 à 1993

Âge au début de la période	1975 à 1984	1984 à 1993	Écart [3]	Taux de variation (%) [4]
18-24	258 130	230 619	27 511	-10,7
25-29	346 117	322 772	23 345	-6,7
30-34	392 203	375 916	16 287	-4,2
35-44	402 704	418 860	-16 156	4,0

Nota : Les calculs s'appliquent à des hommes touchant des salaires positifs pendant les dix années de la période en question.  
Source : Fichier des T4 Supplémentaire.

1984 et ceux de la cohorte de 1975 pendant les premières années de la période (c'est-à-dire, un plus grand nombre de jeunes hommes combinant études et travail à temps partiel et touchant donc des salaires relativement peu élevés), il peut difficilement expliquer pourquoi un tel écart subsiste encore après 10 ans d'observations. En deuxième lieu, les données de l'Enquête sur les finances des consommateurs présentent une situation semblable chez les hommes de 21 à 24 ans qui travaillent à temps plein toute l'année (graphique 3.4). Par conséquent, le nombre croissant d'individus qui combinent études et travail à temps partiel n'explique pas tout.

On pourrait aussi tenter d'expliquer ce déplacement vers le bas du profil âge-salaires des jeunes simplement par l'augmentation du taux de chômage au cours de la deuxième période : des qu'on tient compte des effets cycliques, le profil âge-salaires aurait pu demeurer inchangé. Pour aborder cette question, on modélise le logarithme naturel des salaires réels d'une personne à au temps  $t$ ,  $y(t, t)$ , comme suit :

$$y(t, t) = \beta_0 + \beta_1 X(t, t) + \beta_2 Tchôm(t, t) + u(t, t) \quad (3.1)$$

où  $u(t, t)$  est un terme aléatoire,  $Tchôm(t, t)$  est le taux de chômage régional chez les hommes de 25 à 54 ans et  $X(t, t)$  est un vecteur qui renferme les variables explicatives suivantes : cinq variables régionales nominales; une quadratique de l'âge; deux variables nominales des cohortes (cohorte9=1 si les personnes ont entre 21 et 24 ans en 1979, sinon 0; cohorte83=1 si les personnes ont entre 21 et 24 ans en 1983, sinon 0); et quatre termes d'interaction entre les effets de

la cohorte et la quadratique de l'âge. Les variables nominales des cohortes permettent la **coordonnée à l'origine** du profil âge-salaires de varier d'une cohorte à l'autre, tandis que les termes d'interaction autorisent la variation des **pentés** des profils âge-salaires. On utilise la cohorte de 1975 comme groupe témoin.

Si je m'arrête aux hommes de 21 à 24 ans plutôt qu'à ceux de 18 à 24, c'est pour diminuer l'influence de la croissance de l'inscription scolaire sur les résultats. (Il est impossible de distinguer les travailleurs à temps plein toute l'année des autres travailleurs, car les T4S ne renferment aucune donnée sur les heures de travail.) Cette régression est appliquée à un échantillon qui reflète les trois cohortes : [1] les hommes qui avaient entre 21 et 24 ans en 1975 et qui touchaient des salaires positifs entre 1975 et 1985; [2] les hommes qui avaient entre 21 et 24 ans en 1979 et qui touchaient des salaires positifs entre 1979 et 1989; et [3] les hommes qui avaient entre 21 et 24 ans en 1983 et qui touchaient des salaires entre 1983 et 1993. On procède ainsi pour profiter pleinement des renseignements contenus dans les données. (Vu que la période d'observation s'étend de 1975 à 1993, le choix de cohortes de naissance sur quatre ans permet de suivre trois cohortes différentes de travailleurs sur une période de onze ans.)

Je pose d'abord l'hypothèse que le terme aléatoire  $u(t, t)$  est indépendant d'une personne à l'autre (aucune corrélation transversale), qu'il présente la même variance chez les individus (aucune hétéroscédasticité transversale) et qu'il est indépendant entre les années pour le

comme l'introduction de l'ordinateur personnel — ont pu augmenter la demande de travailleurs hautement spécialisés et ainsi accroître l'écart salarial entre ces deux catégories de travailleurs, dont le capital humain est généralement mesuré par l'expérience sur le marché du travail et la scolarité.

### 3. Nouveaux profils âge-salaires

Même si, sur une base transversale, la diminution des salaires réels chez les jeunes est bien documentée (Beach et Slotve 1994; Morissette, Myles et Picot 1994) il reste à savoir si le profil âge-salaires chez les jeunes travailleurs s'est détérioré avec le temps. Les salaires réels des jeunes travailleurs pourraient être inférieurs en début de carrière, mais ils pourraient ensuite augmenter rapidement pour dépasser ceux de leurs homologues après un certain nombre d'années. Autrement dit, le nouveau profil âge-salaires pourrait recouper l'ancien profil après un certain nombre d'années. Pour déterminer si c'est vraiment le cas, nous avons besoin de données longitudinales.

Les données longitudinales du fichier des T4 Supplémentaire (T4S) pour la période de 1975 à 1993 sont utilisées. Les données reposent sur un échantillon à 1 % de tous les Canadiens qui ont reçu une formule T4S et qui ont produit une déclaration annuelle de revenus T1 au moins une fois entre 1975 et 1993 (pour plus de détails, prière de se reporter à l'annexe). Les salaires annuels dans ce fichier se fondent sur les formules T4S remises par les employeurs, tandis que l'âge et le sexe des travailleurs sont déterminés à partir des enregistrements T1.

Nous avons besoin des fichiers T4S et T1 pour créer la base de données fiscales, parce que les salaires annuels provenant de la première source sont uniformes dans le temps, ce qui n'est pas nécessairement le cas des salaires peu élevés qui proviennent de la deuxième source. (Les crédits d'impôt introduits au milieu des années 1980 ont pu encourager les petits salariés à produire une formule T1 qu'ils n'auraient autrement pas remplie.) Nous avons besoin du fichier T1 pour obtenir de l'information sur l'âge et le sexe des personnes. Ce fichier longitudinal comporte trois grands avantages : [1] l'exactitude des salaires annuels; [2] la taille imposante de l'échantillon; et [3] la longueur de la période visée. Les principales faiblesses du fichier sont l'absence de renseignements détaillés sur les caractéristiques socio-économiques individuelles : en effet,

le fichier ne renferme aucune donnée sur le niveau d'instruction, la fréquentation scolaire, la profession et l'état matrimonial, entre autres variables.

Nous utilisons deux périodes, à savoir de 1975 à 1984 et de 1984 à 1993 pour examiner dans quelle mesure la diminution des salaires réels chez les jeunes, mesurée sur une base transversale, a eu des répercussions à long terme. Chaque période couvre un intervalle de dix ans, comprend une récession et se termine par le début d'une reprise. Pour chacune, un échantillon de travailleurs qui ont touché des salaires positifs pendant les dix années en question a été choisi. Par exemple, pour comparer les résultats des jeunes hommes au cours des deux dernières décennies, je choisis : [1] les hommes qui avaient entre 18 et 24 ans en 1975 et qui avaient touché des salaires positifs pendant les dix années allant de 1975 à 1984; et [2] les hommes qui avaient entre 18 et 24 ans en 1984 et qui avaient touché des salaires positifs pendant les dix années s'échelonnant de 1984 à 1993.

En premier lieu, les salaires réels moyens des hommes âgés de 18 à 24 ans (au début des périodes visées) ont chuté de 11 % ou d'environ 27 000 \$ entre ces deux périodes (tableau 3.7). Par contre, les salaires des hommes de 35 à 44 ans ont légèrement augmenté (4 %). En deuxième lieu, le profil âge-salaires des travailleurs de l'échantillon révèle que les salaires annuels des hommes de 18 à 24 ans en 1984 étaient de 20 % inférieurs à ceux de leurs homologues en 1975 (voir l'annexe 1 au graphique 3.3). Cet écart s'est rétréci à 10 % cinq ans plus tard (l'an 6), mais il n'a pas disparu à la fin de la période<sup>1</sup>. C'est la même chose pour les travailleurs de 21 à 24 ans et ceux de 25 à 29 ans. Cependant, les salaires réels des cohortes de travailleurs de 35 à 44 ans affichent une situation différente. Plus précisément, après une troisième année, les salaires réels de cette cohorte (de 35 à 44 ans) en 1984 sont bien supérieurs à ceux des travailleurs du même groupe d'âge en 1975.

On pourrait prétendre que la diminution observée à l'égard du profil âge-salaires chez les hommes de 21 à 24 ans peut s'expliquer entièrement par le nombre croissant de personnes qui travaillent à temps partiel tout en fréquentant l'école à plein temps. Toutefois, ce raisonnement souffre de deux problèmes. D'abord, même si cet argument peut expliquer en partie l'écart observé entre les salaires réels de la cohorte de

Tableau 3.6  
Variations des salaires horaires réels selon l'âge :  
travailleurs masculins rémunérés occupés à temps plein, 1981 et 1993

Taille de l'échantillon	Modèle 2		Modèle 1	
17 à 24 ans	-0,216	(15,26)	-0,151	(11,53)
25 à 34 ans	-0,063	(6,36)	-0,038	(4,16)
35 à 44 ans	0,081	(6,94)	0,085	(7,89)
45 à 54 ans	0,214	(15,31)	0,171	(13,32)
55 à 64 ans	0,139	(7,27)	0,142	(8,13)
			2 422	

**Nota :** Les chiffres présentés dans ce tableau sont les coefficients d'une variable nominale (an93) qui est égale à 1 en 1993 et à 0 en 1981. Pour les deux modèles, les données pour les années 1981 et 1993 ont été regroupées. La variable dépendante est le logarithme naturel des salaires horaires (en dollars constants de 1993). Le modèle 1 comprend uniquement une coordonnée à l'origine et la variable nominale an93. Le modèle 2 comprend les variables explicatives supplémentaires suivantes : 1) branche d'activité (sept variables nominales), 2) profession (sept variables nominales), 3) régions (quatre variables nominales) et 4) situation vis-à-vis la syndicalisation. La variation en pourcentage des salaires horaires réels correspond à l'anti-logarithme de ces coefficients moins 1. Par exemple, le modèle 2 indique qu'entre 1981 et 1993, les salaires horaires réels des hommes de 17 à 24 ans ont régressé de 13,9 %, c'est-à-dire  $\exp(-0,151) - 1$ . Les valeurs absolues des statistiques t figurent entre parenthèses. Les régressions sont calculées à l'aide de moindres carrés ordinaires. Les catégories « services aux consommateurs », « professions de bureau », « Ontario » et « non syndiqués » représentent les groupes de référence.

**Source :** Enquête sur l'activité de 1981 et Enquête sur la dynamique du travail et du revenu de 1993.

(syndiqués et non syndiqués). On peut considérer la variable nominale de l'année comme une variable qui capture les variations « moyennes » des salaires réels qui se sont produites entre 1981 et 1993 au sein des emplois. Les résultats obtenus de cette spécification (modèle 2) sont comparés à ceux d'un modèle simple où l'on effectue la régression du logarithme naturel des salaires horaires uniquement sur une constante et la variable an93 (modèle 1). Cela nous permet d'évaluer dans quelle mesure les variations sectorielles de la composition de l'emploi selon la branche d'activité et la situation vis-à-vis de la syndicalisation peuvent expliquer les fluctuations des salaires horaires réels entre les groupes d'âge.

Les résultats sont présentés au tableau 3.6. Le message est clair. Pour tous les groupes d'âge, la plus grande partie de la variation des salaires horaires réels survenue entre 1981 et 1993 subsiste lorsqu'on tient compte des déplacements d'emploi entre les branches d'activité et des variations du taux de syndicalisation. Par exemple, le modèle 1 indique que les salaires

horaires réels des jeunes hommes occupés à temps plein ont régressé de 19 %  $\exp[-0,216] - 1$  entre 1981 et 1993. Le modèle 2 révèle que même si l'on tient compte des modifications de l'emploi entre les grands groupes de branches d'activité et de la situation vis-à-vis de la syndicalisation, les salaires réels pour ce groupe ont diminué de 14 %  $\exp[-0,151] - 1$ . Les variations sectorielles de la composition de l'emploi par branche d'activité et la diminution du taux de syndicalisation ne semblent donc pas être les principaux facteurs qui expliquent la chute des salaires réels chez les jeunes. Cela va de pair avec le fait que la baisse des salaires chez les jeunes survient dans l'ensemble des branches d'activité et des groupes de professions (Betcheman et Morissette 1994).

Un autre argument est que la croissance du commerce international a augmenté l'offre mondiale de travailleurs peu spécialisés et a donc exercé des pressions à la baisse sur les salaires de ces travailleurs tout en relevant ceux des travailleurs hautement spécialisés (Wood 1994). Par ailleurs, les changements technologiques—



Graphique 3.2  
Salaires horaires réels indexés des travailleurs rémunérés\* de sexe masculin occupés à temps plein, selon l'âge, 1981-1993 (1981 : 100)



\* Travailleurs rémunérés de sexe masculin ayant entre 17 et 64 ans, occupés à temps plein dans leur emploi principal  
Source : Enquête sur l'activité de 1981, Enquête sur l'adhésion syndicale de 1984, Enquêtes sur l'activité de 1986-1990 et en décembre.  
Enquête sur la dynamique du travail et du revenu de 1993.

temps, les hommes de 45 ans ou plus touchaient des gains substantiels; entre 1981 et 1993, leurs salaires réels ont augmenté d'au moins 15 %.

La baisse des salaires chez les jeunes par rapport aux travailleurs d'âge mûr n'est pas un phénomène unique au Canada. Même si le moment et l'ampleur de la diminution sont différents d'un pays à l'autre, les salaires des jeunes ont chuté dans plusieurs pays entre le milieu des années 1970 et le milieu des années 1990 : États-Unis, Royaume Uni, Australie, France, Allemagne et Japon (OCDE 1996).

Diverses explications ont été avancées pour expliquer l'écart salarial croissant entre les groupes d'âge. On peut facilement rejeter l'argument que cet écart est causé par les fluctuations de l'offre de main-d'œuvre chez les jeunes car, dans la plupart des pays en question, le pourcentage de jeunes dans la population active ne cesse de diminuer. Par conséquent, toutes choses étant égales par ailleurs, on s'attendrait à ce que les variations de l'offre de main-d'œuvre chez les jeunes réduisent l'écart salarial entre les groupes d'âge.

Les modifications de la composition de l'emploi par branche d'activité pourraient expliquer en partie la diminution des salaires réels chez les jeunes au Canada. Entre 1981 et le milieu des années 1990, l'emploi à temps plein s'est

déplacé vers les services aux consommateurs (où les emplois sont en général, moins bien rémunérés) plus chez les jeunes que chez les travailleurs âgés. De plus, le taux de syndicalisation chez les jeunes a diminué considérablement. Pour évaluer la contribution de ces deux facteurs, nous avons regroupé les données pour 1981 et 1993 et nous avons effectué la régression du logarithme naturel des salaires horaires sur un ensemble de variables associées à la branche d'activité, à la situation à l'égard de la syndicalisation, aux professions et aux régions pour chacun des cinq groupes d'âge (de 17 à 24 ans, de 25 à 34 ans, de 35 à 44 ans, de 45 à 54 ans et de 55 à 64 ans). Les variables explicatives comprennent aussi une variable nominale égale à 1 en 1993 et à 0 en 1981 (qu'on nomme an93). Cette variable mesure la diminution des salaires horaires réels entre 1981 et 1993. Idéalement, on voudrait inclure des variables de contrôle pour le niveau de scolarité. Cependant, les modifications des catégories de scolarité introduites en 1990 ne permettent pas de comparer les niveaux d'études entre 1981 et 1993. Les termes d'interaction entre la variable nominale annuelle et les autres variables explicatives sont exclus, ce qui contraindrait les variations temporelles des salaires horaires réels à être identiques pour l'ensemble des branches d'activité, professions, régions et types d'emploi

Tableau 3.4

Taux de syndicalisation des hommes occupés à temps plein, 1981-1995

	17 à 24 ans	25 à 64 ans	17 à 64 ans
1981	32,8	46,1	43,6
1986	22,2	45,3	41,9
1989	24,0	44,5	41,7
1995	15,1	40,4	37,8

Nota: Pour les années 1981, 1986 et 1989, les chiffres reposent sur la question suivante :

« Êtes-vous membre d'un syndicat ou d'un autre groupe qui négocie collectivement avec cet employeur ? »

Pour 1995, les chiffres reposent sur la question suivante :

« Êtes-vous syndiqué dans votre emploi (principal) ? »

Source : Enquête sur l'activité de 1981, Enquête sur l'activité de 1986 et 1989, Enquête sur les horaires et les conditions de travail de 1995.

Tableau 3.5

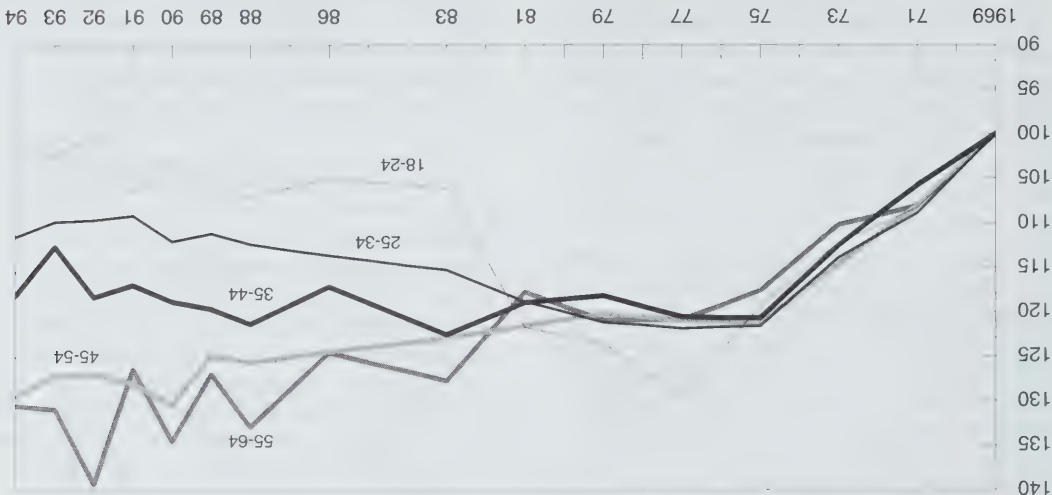
Population active auxiliaire : hommes âgés de 17 à 64 ans, non-étudiants à plein temps et actifs, 1995

	17 à 24 ans	25 à 64 ans	17 à 64 ans
En chômage	16,9	7,7	8,7
Occupé involontairement à temps partiel	8,3	2,2	2,8
Emploi non permanent	9,9	5,1	5,6
Population active auxiliaire	35,1	15,0	17,1
Autres	64,8	85,0	82,9

Nota : La population active auxiliaire désigne l'ensemble des personnes en chômage, occupées involontairement à temps partiel et celles détenant un emploi non permanent.

Source : Statistique Canada, Enquête sur horaires et les conditions de travail de 1995.

Graphique 3.1  
Traitements et salaires réels indexés des hommes occupés à temps plein toute l'année, selon l'âge, 1969-1994 (1969 : 100)



Tendances de l'emploi chez les hommes qui n'étudiaient pas à plein temps, selon l'âge, 1976 à 1996

Tableau 3.2

A. Rapport emploi-population	1976	1981	1986	1989	1993	1996
[1] 17-24 ans	83,5	82,7	80,5	84,6	75,6	77,5
[2] 25 à 34 ans	93,5	92,1	88,9	90,8	84,8	86,7
[3] 35 à 64 ans	93,5	92,1	88,9	90,8	84,8	86,7
[4] = [1] / [3]	0,89	0,90	0,91	0,93	0,89	0,89

B. Taux de chômage

[1] 17 à 24 ans	10,5	12,5	14,3	10,0	17,4	14,5
[2] 25 à 34 ans	4,0	5,1	8,3	5,9	10,9	8,5
[3] 35 à 64 ans	2,9	3,8	5,5	4,3	8,3	6,8
[4] = [1] / [3]	3,6	3,3	2,6	2,3	2,1	2,1

C. Taux de chômage + taux d'emploi à temps partiel involontaire

[1] 17 à 24 ans	11,6	14,8	18,3	13,1	25,2	21,2
[2] 25 à 34 ans	4,3	5,9	10,1	6,9	13,9	10,7
[3] 35 à 64 ans	3,1	4,3	6,6	5,0	10,3	8,5
[4] = [1] / [3]	3,7	3,4	2,8	2,6	2,4	2,5

D. Durée du chômage\*

[1] 17 à 24 ans	12,3	14,3	15,8	11,5	23,3	17,9
[2] 25 à 34 ans	13,3	16,6	23,4	19,8	29,0	26,7
[3] 35 à 64 ans	18,9	20,8	33,2	27,5	35,1	32,8
[4] = [1] / [3]	0,65	0,69	0,48	0,42	0,66	0,55

\* Nombre moyen de semaines pendant lesquelles une personne a cherché du travail, au moment de l'interview.  
Source : Statistique Canada, Enquête sur la population active (fichiers de septembre).

Tableau 3.3

Répartition de l'emploi par branche d'activité : hommes occupés à temps plein, 1981-1995

	17 à 24 ans			25 à 64 ans			17 à 64 ans		
	1981	1989	1995	1981	1989	1995	1981	1989	1995
Agriculture	2,6	2,4	2,8	0,7	0,9	0,9	1,1	1,1	1,1
Forêt et mines	4,5	2,6	3,5	4,4	4,0	3,6	4,4	3,8	3,5
Construction	10,8	13,1	12,3	7,4	8,6	7,1	8,0	9,2	7,7
Fabrication	30,2	26,2	22,9	28,0	27,7	27,2	28,4	27,5	26,8
Services de distribution	15,2	11,7	14,1	19,5	18,5	18,3	18,7	17,5	17,9
Services commerciaux	5,7	6,7	7,0	7,6	8,0	9,7	7,2	7,8	9,4
Services aux consommateurs	23,3	29,7	33,3	11,7	12,1	13,8	13,8	14,5	15,9
Services publics	7,7	7,5	4,2	20,9	20,4	19,4	18,4	18,6	17,8

Source : Statistique Canada, Enquête sur l'activité de 1981, Enquête sur l'activité de 1989, Enquête sur les horaires et les conditions de travail de 1995.



Tendances de l'emploi chez les hommes de 17 à 24 ans (1976 à 1996)

	1976	1981	1986	1989	1993	1996
--	------	------	------	------	------	------

A. Parts des jeunes hommes sur le marché du travail

[1] Part des hommes de 17 à 24 ans en pourcentage des hommes de 17 à 64 ans	25,4	24,8	21,5	18,9	17,4	16,7
[2] Pourcentage des hommes de 17 à 24 ans qui étudient à plein temps	27,8	27,7	33,6	36,7	44,7	44,6
[3] Pourcentage des hommes de 17 à 24 ans qui ne sont ni occupés ni à l'école	11,4	12,1	12,4	9,3	12,4	11,2
[4] Pourcentage des hommes de 17 à 24 ans qui ne sont ni actifs ni à l'école	4,5	3,8	3,6	3,5	4,2	4,6
[5] Pourcentage des hommes de 17 à 24 ans qui ne sont pas actifs mais qui fréquentent l'école	20,3	17,6	21,2	20,9	26,2	27,2

B. Tous les hommes de 17 à 24 ans

[1] Taux d'activité	75,2	78,6	75,3	75,6	69,6	68,2
[2] Rapport emploi-population	67,5	68,6	64,6	68,1	57,7	58,2
[3] Taux de chômage	10,2	12,6	14,2	9,9	17,1	14,8
[4] Taux d'emploi à temps partiel involontaire*	1,0	2,1	3,4	2,6	6,3	5,3
[5] = [3] + [4]	11,2	14,7	17,6	12,5	23,4	20,1

C. Hommes de 17 à 24 qui n'étudient pas à plein temps

[1] Taux d'activité	93,3	94,6	94,0	94,0	91,5	90,6
[2] Rapport emploi-population	83,5	82,7	80,5	84,6	75,6	77,5
[3] Taux de chômage	10,5	12,5	14,3	10,0	17,4	14,5
[4] Taux d'emploi à temps partiel involontaire*	1,1	2,3	4,0	3,1	7,9	6,7
[5] = [3] + [4]	11,6	14,8	18,3	13,1	25,3	21,2

\* Nombre d'hommes de 17 à 24 ans qui travaillent involontairement à temps partiel, divisé par le nombre d'hommes de 17 à 24 ans dans la population active.  
Source: Statistique Canada, Enquête sur la population active (fichiers de septembre).

2. Salaires annuels et salaires horaires

Entre 1969 et 1977, les salaires annuels réels des hommes de 18 à 24 ans occupant un poste

respondant est de 15 %.

qu'on pourrait appeler une population active auxiliaire. En 1995, 17 % de tous les jeunes hommes actifs sur le marché du travail étaient chômeurs, 8 % détenaient un emploi à temps partiel imposé et 10 % occupaient des postes non permanents (tableau 3.5). Par conséquent, 35 % d'entre eux n'avaient pas d'emploi, étaient sous-employés ou occupaient un poste temporaire. Chez les hommes de 25 à 64 ans, le chiffre correspondant est de 15 %.

Cette diminution des salaires annuels réels est survenue de concert avec une baisse des salaires horaires réels. Les salaires horaires réels des hommes de 17 à 24 ans occupant un emploi à temps plein ont diminué en gros de 20 % entre 1981 et 1986 (graphique 3.2), mais ont augmenté de 5 points entre 1986 et 1990 pour ensuite fléchir entre 1990 et 1993. Pendant ce

à temps plein toute l'année ont augmenté de 30 % (graphique 3.1). Les salaires ont commencé à fléchir après 1977, ils ont fait une chute prononcée entre 1981 et 1983 et ils n'ont pas récupéré. Aussi, les jeunes hommes qui ont travaillé à temps plein toute l'année en 1994 ont touché (en chiffres réels) la même chose que leurs homologues en 1969.

1. Tendances de l'emploi

sous-emploi selon le groupe d'âge. Deux points ressortent. D'abord, même si les taux de chômage et de sous-emploi (chômage plus emploi à temps partiel involontaire) chez les jeunes hommes sont maintenant plus élevés qu'en 1976, ils ont diminué relativement à ceux des hommes de 35 à 64 ans. Le même argument s'applique aux taux d'emploi : les rapports emploi-population chez les jeunes gens sont maintenant moins élevés qu'ils ne l'étaient en 1976, mais ils ne se détériorent pas par rapport à ceux des travailleurs plus âgés. En deuxième lieu, entre 1981 et 1989, la durée (tronquée) des périodes de chômage a eu tendance à augmenter chez les travailleurs de 25 ans ou plus mais non chez les jeunes hommes. Aussi, bien que la durée du chômage s'accroisse chez les jeunes depuis les sept dernières années, elle est plus faible en 1996 qu'elle ne l'était en 1976 par rapport à celle des travailleurs plus âgés.

Le type d'emploi qu'occupent les jeunes hommes a changé sous au moins trois rapports depuis les 15 dernières années. D'abord, les emplois à temps plein chez les jeunes ne sont plus répartis en grande partie dans le secteur de la fabrication et des services publics; on retrouve maintenant davantage d'emplois faiblement rémunérés dans les services aux consommateurs, 23 % dans les services publics (tableau 3.3). En 1995, les chiffres correspondants s'établissaient à 23 %, 33 % et 4 %. Même si l'on observe les mêmes déplacements chez les travailleurs masculins de 25 à 64 ans, ils sont beaucoup moins prononcés. En deuxième lieu, bien que le taux de syndicalisation de tous les travailleurs masculins à temps plein ait légèrement diminué entre 1981 et 1995, le taux des jeunes hommes travaillant à temps plein a diminué de 50 % pendant cette période, passant de 33 % en 1981 à 15 % en 1995 (tableau 3.4). En troisième lieu, la traction des emplois à temps plein couverts par un régime de retraite a régressé chez les jeunes hommes, passant de 29 % à 25 % entre 1984 et 1995, mais elle est demeurée à peu près inchangée chez les travailleurs masculins plus âgés, à 64 %. Ainsi, on trouve moins souvent d'emplois à temps plein occupés par des jeunes hommes dans les secteurs bien rémunérés de l'économie, et ces emplois sont moins syndicalisés et moins nombreux à être associés à un régime de retraite.

Il en découle donc qu'un pourcentage important des jeunes font maintenant partie de ce

Il est bien connu que l'importance de la jeunesse au cours de la population a régressé énormément au cours des vingt dernières années. En 1976, les jeunes hommes (ceux qui avaient entre 17 et 24 ans) figuraient pour 25 % de la population masculine de 17 à 64 ans; 20 ans plus tard, ce pourcentage était tombé à 17 % (tableau 3.1). Que ce soit en réponse à une conjoncture défavorable ou à une hausse du taux de rendement associé à une scolarité accrue, le pourcentage de jeunes gens qui fréquentent l'école à plein temps depuis le début des années 1980 est plus élevé. En effet, ce pourcentage est passé de 28 % en 1981 à 37 % en 1989, et il se situe à 45 % en 1996.

Chez ceux qui n'étudient pas à plein temps et qui donc, peut-on penser, ont fait la transition entre l'école et le travail, l'expérience du marché du travail s'est détériorée. Entre le milieu des années 1970 et la fin des années 1980, le taux d'activité, le rapport emploi-population et le taux de chômage au sein de ce groupe ont affiché une certaine variation cyclique mais aucune tendance ascendante. En gros, 94 % des jeunes hommes qui ne fréquentent pas l'école à plein temps étaient actifs sur le marché du travail en 1976 et aussi en 1989. De plus, 85 % étaient occupés et 10 % de ceux qui étaient actifs n'avaient pas d'emploi (tableau 3.1, volet C). Toutefois, les trois statistiques révèlent qu'entre 1989 et 1996, les conditions du marché du travail ont empiré. Le nombre d'actifs sur le marché du travail et de jeunes gens occupés a diminué tandis que le pourcentage des actifs qui connaissent une période de chômage est plus élevé.

Le volet B du tableau 3.1 révèle la même situation pour tous les hommes de 17 à 24 ans. En effet, le taux d'activité pour ce groupe est passé de 76 % en 1989 à 68 % en 1996. En termes permanents comparables, la plus grande partie de cette diminution est associée à une augmentation de la fréquentation scolaire : la traction des jeunes hommes qui ne participent pas au marché du travail mais qui fréquentent l'école à temps partiel ou à plein temps a augmenté de 6 points au cours de la même période, passant de 21 % en 1989 à 27 % en 1996. Aussi, le pourcentage de jeunes hommes qui ne sont ni actifs ni étudiants n'a que très peu varié entre ces deux années.

Le tableau 3.2 présente la situation des personnes qui n'étudient pas à plein temps et compare leurs taux d'emploi, de chômage et de

# Dégradation de la situation des jeunes hommes par rapport au marché du travail

RENÉ MORISSETTE

À partir du début des années 1960 jusqu'au milieu des années 1970, les jeunes Canadiens ont vécu dans une économie qui a engendré des taux élevés de croissance de la production et du revenu réel ainsi que des taux de chômage relativement faibles. Ils ont pu profiter de l'expansion de l'emploi dans le secteur des biens et dans les services publics, deux branches qui offrent typiquement de bons débouchés aux débutants. Ils sont entrés sur le marché du travail à une période où le fléet de la sécurité sociale du pays devenait de plus en plus généreux. La plupart d'entre eux s'attendaient sans doute à ce que les revenus de toute leur vie dépassent ceux de leurs parents.

Aujourd'hui, la situation est différente pour les jeunes Canadiens. La croissance du PIB réel par habitant a ralenti; le revenu médian des familles et les gains des salariés à temps plein toute l'année stagnent; le taux de chômage continue d'être élevé; les compressions budgétaires ont stoppé la croissance de l'emploi dans la fonction publique; et les programmes d'assurance-chômage et de soutien du revenu sont devenus plus restrictifs. Selon des données non scientifiques, la génération des jeunes d'aujourd'hui ne semble pas s'attendre à un avenir plus prometteur que celui de leurs parents. Elle semble plutôt être davantage préoccupée par le fait que la transformation structurelle du marché du travail a pu diminuer ses chances de profiter d'un niveau de vie « décent ».

Le but de ce chapitre est de documenter la façon dont les jeunes se débrouillent sur le marché du travail d'aujourd'hui. Deux raisons nous amènent à choisir les jeunes hommes. D'abord, la plupart des ouvrages récents sur la croissance de l'inégalité des salaires portent sur les hommes. Cette approche est adoptée car l'une des questions abordées a trait aux conséquences de

la croissance de l'inégalité des salaires sur le profil âge-salaires chez les jeunes. En second lieu, et plus important encore, le comportement des femmes sur le marché du travail est beaucoup plus complexe à examiner, car leur taux d'activité a changé radicalement au cours des 20 dernières années.

À l'aide d'une grande diversité de données transversales et longitudinales, quatre résultats importants sont obtenus. D'abord, par rapport à leurs homologues du début des années 1980, les jeunes hommes d'aujourd'hui se débrouillent beaucoup moins bien si l'on se fie à un vaste éventail d'indicateurs du marché du travail. La génération des années 1990 fréquente beaucoup plus l'école, mais ceux qui ne sont pas à l'école à plein temps ont moins de chances de trouver un emploi. Du même coup, ceux qui sont occupés ont moins de chances d'être employés à temps plein, tandis que ceux qui ont un travail à temps plein touchent un salaire moins élevé et sont plus concentrés dans le secteur des services aux consommateurs, ils ont moins tendance à être syndiqués et ils ont aussi moins tendance à participer à un régime de retraite. En deuxième lieu, la diminution des salaires réels chez les jeunes hommes subsiste dans une large part même lorsqu'on tient compte de la baisse considérable du taux de syndicalisation et des modifications de la répartition de l'emploi dans les branches salaires réels sur une base transversale semble avoir eu des répercussions à long terme : comparativement à celui des cohortes antérieures, le profil âge-revenus des récentes cohortes de jeunes hommes s'est détérioré. Enfin, les jeunes hommes semblent avoir légèrement moins de chances de progresser dans les années 1980 qu'au milieu des années 1970, même lorsqu'on tient compte à la fois des effets cycliques et de la baisse des salaires réels.



WOLFSON, M. et B. MURPHY (1996). « Aging and Canada's Public Sector: Retrospect and Prospect. » Ottawa : Statistique Canada, Direction des études analytiques. Non publié.

WOLFSON, M. et B. MURPHY (1995). « Kinder and Gentler: A Comparative Analysis of Incomes of the Elderly in Canada and the United States. » Dans Theodore R. Marmor, Timothy M. Smeeding et Vernon L. Greene (dir.). Economic Security and Intergenerational Justice: A Look at North America. Washington D.C.: The Urban Institute.

BLANK, R. et M. HANRATTY (1993). « Responding to Need: A Comparison of Social Safety Nets in Canada and the United States. » Dans David Card et Richard B. Freeman (dir.). *Small Differences that Matter: Labor Markets and Income Maintenance in Canada and the United States*. Chicago: University of Chicago Press.

CALEDON INSTITUTE OF SOCIAL POLICY (1997). *Persistent Poverty*. Ottawa : Caledon Institute of Social Policy.

CHARETTE, M.F. et R. MENG (1994). « The Determinants of Welfare Participation of Female Heads of Households in Canada. » *Canadian Journal of Economics*. Vol. 27, n° 2, 290-306.

CONSEIL NATIONAL DU BIEN-ÊTRE (1997). *Another Book at Welfare Reform*. Ottawa : Conseil National du Bien-être.

DAVIS, S. (1992). « Cross-Country Patterns of Change in Relative Wages. » NBER document de travail n° 4085.

DOOLEY, M. (1994a). « Women, Children and Poverty in Canada. » *Canadian Public Policy*. Vol. 20, 430-43.

DOOLEY, M. (1994b). « The Use of Social Assistance Income by Canadian Lone Mothers. » Department of Economics, McMaster University. Non publié.

DOOLEY, M. (1991). « The Demography of Child Poverty in Canada: 1973-1986. » *Canadian Studies in Population*. Vol. 18, 53-74.

GOTTSCHALK, P. et S. DANZIGER (1993). « Family Structure, Family Size and Family Income: Accounting for Changes in the Economic Well Being of Children, 1968-1986. » Dans Sheldon Danziger et Peter Gottschalk (dir.). *Uneven Tides, Rising Inequality in America*. New York: Russell Sage, 167-93.

HUM, D. et W. SIMPSON (1991). *Soutien du revenu et propension au travail, l'expérience canadienne*. Ottawa : Conseil économique du Canada.

KATZ, L. F. et K.M. MURPHY (1992). « Changes in Relative Wages, Supply and Demand Factors. » *Quarterly Journal of Economics*. Vol. 107, 235-78.

KAPSALIS, C. (1996). « Social Assistance Benefit Rates and the Employment Rates of Lone Mothers. » Ottawa : Développement des

Ressources humaines Canada. Document de travail W-96-5E.

KUHN, P. et A. L. ROBB (1996). « Shifting Skill Demand and the Canada-U.S. Unemployment Gap. » McMaster University, Department of Economics. Non publié.

McFATE, K., T. SMEEDING et L. RAINWATER (1995). « Markets and States: Poverty Trends and Transfer System Effectiveness in the 1980s. » Dans K. McFate, R. Lawson et W. J. Wilson (dir.). *Poverty, Inequality and the Future of Social Policy*. New York: Russell Sage.

MORISSETTE, R., J. MYLES et G. PICOT (1995). « Earnings Polarization in Canada, 1986-1991. » Dans K.G. Banting et C. Beach (dir.). *Labour Market Polarization and Social Policy Reform*. Kingston: Queen's University, School of Policy Studies.

MOFFIT, R. (1992). « Incentive Effects of the U.S. Welfare System: A Review. » *Journal of Economics Literature*. Vol. 30, n° 1, 1-61.

MYLES, J. (1989). *Old Age in the Welfare State: The Political Economy of Public Pensions*. Lawrence, Kansas: University Press of Kansas.

PAMPPEL, F. (1979). « Changes in the Labor Force Participation and Income of the Aged in the United States 1947-1976. » *Social Problems*. Vol. 27, 125-142.

PICOT, G. (1998). « Le point sur l'inégalité des gains et sur la rémunération des jeunes durant les années 90. » Ottawa : Statistique Canada, Direction des études analytiques, document de recherche n° 116.

PICOT, G. et J. MYLES (1996). « Social Transfers, Changing Family Structure and Low-Income Among Children. » *Canadian Public Policy*. Vol. 22, 244-67.

PODOLUK J. (1968). *Incomes of Canadians*. Ottawa : Bureau fédéral de la statistique.

SHARIF, N. et S. PHIPPS (1994). « The Challenge of Child Poverty. » *Canadian Business Economics*. Vol. 2, 17-30.

STATISTIQUE CANADA (1997). Répartition du revenu au Canada selon la taille du revenu, 1996. Ottawa : Statistique Canada, n° 13-207 au catalogue.

WOLFSON, M. et J. EVANS (1992). Seuls de faible revenu de Statistique Canada : problèmes et possibilités méthodologiques. Ottawa : Statistique Canada, Document de travail.

Notes

Nous tenons à remercier Dean Lillard, ainsi qu'un collaborateur anonyme, pour leurs précieuses observations, tout en précisant que le présent document reflète uniquement le point de vue des auteurs, et pas nécessairement celui de Statistique Canada.

<sup>1</sup> Pampel (1979) en témoigne eloquemment à

partir de données américaines. Le revenu relatif des personnes âgées s'est replié continuellement de la fin des années 40 jusqu'aux années 60. D'importantes réformes de la sécurité sociale ont eu lieu à la fin des années 60 et au début des années 70, de sorte qu'à la fin des années 70, la situation économique relative des personnes âgées était revenue au niveau de l'après-guerre. Au Canada, on ne dispose de séries continues et comparables de données sur le revenu qu'à partir de la fin des années 60. Toutefois, la similitude des fluctuations de l'emploi au sein de la population âgée de 65 ans et plus, allée aux préoccupations accrues soulevées par la pauvreté de la vieillesse au cours des années 60, laisse supposer une tendance comparable au Canada. Pour obtenir des données sur le revenu des personnes âgées en 1951 et 1961, voir Podoluk (1968).

<sup>2</sup> Nous avons répété cette analyse en utilisant le

seuil de faible revenu (SFR) après impôts et transferts comme mesure du faible revenu, et les résultats sont très semblables. Le système de transferts a réduit de plus en plus le niveau de faible revenu au cours des années 80 et au début des années 90. Chez les enfants, par exemple, en fonction du revenu gagné, la fréquence du faible revenu augmenté considérablement (passant de 16,8 % en 1981 à 24,1 % en 1994). Lorsqu'on ajoute les impôts et les transferts, le taux réel de faible revenu (après impôts et transferts) augmenté beaucoup moins (il passe de 12,7 % à 15,6 %). L'ajout des impôts et des transferts réduit le taux d'environ quatre points en 1981, mais de sept points en 1990 et de 8,5 points en 1994, ce qui témoigne du rôle accru joué par le système de transferts jusqu'ici. On observe des résultats semblables chez les adultes de 25 à 34 ans et de 45 à 54 ans : la fréquence réelle du faible revenu en fonction du revenu disponible augmenté au cours des années 90, mais beaucoup moins qu'en fonction du seul revenu gagné.

<sup>3</sup> On calcule habituellement cette statistique en fonction de la famille de recensement, qui

comprend uniquement la famille immédiate (les enfants et le parent). Nous utilisons plutôt la famille économique, qui comprend la famille immédiate et les autres personnes apparentées. Ainsi, l'enfant d'une mère seule qui habite avec ses parents ne serait pas considéré comme vivant dans une famille monoparentale selon la définition utilisée ici, mais il le serait selon la définition de famille de recensement. Nous supposons que cet enfant bénéficie d'une partie des ressources économiques de la cellule familiale élargie. Toutefois, la proportion des enfants vivant dans des familles monoparentales est alors inférieure à celle qui est déclarée ailleurs.

<sup>4</sup> Comme la plupart des personnes âgées ne sont pas occupées, on pourrait soutenir que le niveau d'instruction est sans importance pour leur revenu. Premièrement, un niveau d'instruction élevé améliore, chez les personnes âgées qui demeurent sur le marché du travail, la capacité de gagner leur vie. Deuxièmement, les personnes qui possèdent un niveau d'instruction élevé sont proportionnellement plus nombreuses que les autres à avoir accumulé des économies et des droits à la retraite pendant leur vie active.

<sup>5</sup> La proportion des hommes occupés (le ratio emploi-population) diminue lentement depuis un certain temps : elle est passée de 73,1 % au point culminant du cycle économique de 1981 à 71,4 % à celui de 1989. Le ratio a ensuite fortement chuté à 65 % en 1992 et est demeuré à ce niveau jusqu'en 1996. Le recul a été particulièrement sensible chez les hommes de 25 à 44 ans : le ratio est passé de 88 % en 1989 à 83 % en 1996. Le ratio emploi-population des femmes a augmenté régulièrement tout au long de la période pour culminer à 54 % en 1990; depuis, il est tombé à environ 52 %. Par contraste avec les hommes du même groupe d'âge, toutefois, le taux d'activité des femmes de 25 à 44 ans est resté à son niveau d'avant la récession : il était d'environ 71 % en 1996.

Bibliographie

BATTLE, K. et L. MUSZYNSKI (1995). *One Way to Fight Child Poverty*. Ottawa : Caledon Institute of Social Policy.

BLANK, R. et D. CARD (1993). « Poverty, Income Distribution and Growth: Are They Still Connected? » *Brookings Papers on Economic Activity*. Vol. 2, 285-339.



Tableau 2A.2 – fin

# Résultats des régressions logistiques de la probabilité qu'un individu ait un revenu inférieur à la moitié du revenu médian

	1973		1981		1988		1994		1995	
	Coefficient	Statistique t	Coefficient	Statistique t	Coefficient	Statistique t	Coefficient	Statistique t	Coefficient	Statistique t
Deux adultes ou plus, aucun enfant, deux soutiens ou plus <sup>a</sup>										
Deux adultes ou plus, un enfant ou plus, un soutien	2,505	15,09	2,476	17,26	2,841	15,92	1,928	11,00	2,340	14,88
Deux adultes ou plus, un enfant ou plus, deux soutiens ou plus	1,479	9,05	1,006	7,61	1,229	7,66	0,733	5,21	0,677	4,81
Taille de l'échantillon	8 390		10 464		9 670		12 167		11 085	
Chi carré modèle	1554,75		1724,45		1902,85		1911,99		1818,92	
<b>D. 65 ans et plus</b>										
Coordonnée à l'origine	-6,056	-15,98	-6,312	-22,08	-7,365	-20,68	-6,323	-17,44	-6,815	-15,58
Études										
Primaires	1,216	3,83	0,733	3,60	0,840	3,90	0,493	1,88	-0,167	-0,69
Secondaires	0,765	2,38	0,267	1,29	0,595	2,72	-0,122	-0,46	-0,782	-3,11
Universitaires partielles / collégiales	0,256	0,74	-0,050	-0,22	0,503	2,10	-0,132	-0,42	-1,066	-3,21
Diplôme universitaire <sup>a</sup>										
Nombre de soutiens										
Aucun	2,258	11,78	2,614	12,04	3,062	10,09	1,864	6,46	1,781	4,83
Un	0,910	4,78	1,520	7,00	1,734	5,79	0,630	2,12	1,022	2,76
Deux ou plus <sup>a</sup>										
Nombre d'adultes										
Un	1,403	10,69	0,923	7,98	-0,025	-0,15	-0,634	-2,94	0,384	1,57
Deux	-0,027	-0,21	-0,663	-5,64	-0,913	-5,59	-1,305	-6,02	-0,463	-1,91
Trois ou plus <sup>a</sup>										
Protection en matière de pensions										
Aucun RPC/RRO, régime de retraite privé	0,180	0,95	1,395	8,46	2,132	9,87	2,825	8,10	1,982	4,11
RPC/RRO, aucun régime de retraite privé	1,689	10,11	1,829	14,97	2,101	13,91	2,125	9,52	2,537	9,57
Aucun RPC/RRO, aucun régime de retraite privé										
RPC/RRO, régime de retraite privé <sup>a</sup>	2,218	14,55	2,925	24,52	3,703	24,61	4,147	18,52	4,348	16,14
Taille de l'échantillon	7 225		10 260		10 573		11 272		10 426	
Chi carré modèle	2260,98		3097,42		2071,74		1001,56		842,14	

<sup>a</sup> Catégories de référence.

Tableau 2A.2 – suite  
Résultats des régressions logistiques de la probabilité qu'un individu ait un revenu inférieur à la moitié du revenu médian

	1973		1981		1988		1994		1995	
	Coefficient	Statistique t	Coefficient	Statistique t	Coefficient	Statistique t	Coefficient	Statistique t	Coefficient	Statistique t
<b>Diplôme universitaire<sup>a</sup></b>										
Type de famille / Nombre de soutiens										
Personne seule, aucun enfant, aucun soutien	6,568	15,08	7,088	16,77	5,541	24,89	4,524	27,59	4,720	24,77
Personne seule, aucun enfant, un soutien	2,363	10,61	2,272	14,85	2,494	18,77	1,936	16,52	1,791	13,43
Un adulte, un enfant, aucun soutien	5,515	10,88	7,901	8,55	6,358	14,85	4,142	19,32	5,317	15,81
Un adulte, un enfant, un soutien	2,695	7,35	3,393	15,53	3,351	16,67	2,371	11,90	2,514	11,81
Un adulte, deux enfants ou plus, aucun soutien	7,243	12,46	7,057	15,15	6,983	4,728	4,726	22,80	5,069	20,72
Un adulte, deux enfants ou plus, un soutien	3,812	13,15	3,886	18,56	4,143	21,63	3,003	15,50	3,045	14,19
Deux adultes ou plus, aucun enfant, aucun soutien	4,765	11,54	3,831	15,27	4,357	17,56	3,089	14,84	3,056	13,91
Deux adultes ou plus, aucun enfant, un soutien	1,769	6,54	2,218	11,99	1,728	8,74	1,497	9,22	1,901	11,34
Deux adultes ou plus, aucun enfant, deux soutiens ou plus <sup>a</sup>										
Deux adultes ou plus, un enfant ou plus, aucun soutien	5,906	16,17	6,291	18,81	5,930	20,62	4,884	27,10	5,128	22,44
Deux adultes ou plus, un enfant ou plus, un soutien	2,149	10,93	2,476	17,24	2,549	18,93	2,122	17,51	2,393	17,82
Deux adultes ou plus, un enfant ou plus, deux soutiens ou plus	0,946	4,48	0,910	5,98	1,061	7,82	0,253	1,93	0,528	3,69
Taille de l'échantillon	11 320		17 225		16 747		15 354		12 481	
Chi carré modèle	1592,35		2910,31		2984,63		2826,06		2304,55	
<b>C. 45-54 ans</b>										
Coordonnée à l'origine	-5,928	-16,57	-4,708	-23,46	-5,197	-26,75	-4,418	-32,15	-4,007	-31,83
<b>Études</b>										
Primaires	2,486	7,47	1,463	7,76	1,722	9,54	1,028	7,16	0,576	4,23
Secondaires	1,589	4,74	0,686	3,58	0,945	5,29	0,816	6,44	0,465	4,02
Universitaires partielles / collégiales	0,634	1,66	0,200	0,88	0,767	3,80	0,477	3,22	0,225	1,65
<b>Diplôme universitaire<sup>a</sup></b>										
Type de famille / Nombre de soutiens										
Personne seule, aucun enfant, aucun soutien	6,631	16,55	4,757	23,33	5,791	26,91	4,442	29,67	4,626	30,16
Personne seule, aucun enfant, un soutien	2,287	11,05	2,028	13,20	2,466	16,38	1,857	15,30	1,787	14,47
Un adulte, un enfant ou plus	4,135	11,59	3,468	12,46	3,546	12,60	3,009	13,81	2,601	11,81
Deux adultes ou plus, aucun soutien	4,811	22,51	4,352	25,58	4,089	24,27	3,772	29,38	3,713	27,16
Deux adultes ou plus, aucun enfant, un soutien	1,562	8,67	1,796	13,94	1,854	11,69	1,455	11,62	1,487	11,88

Tableau 2A.2

# Résultats des régressions logistiques de la probabilité qu'un individu ait un revenu inférieur à la moitié du revenu médian

	1973		1981		1988		1994		1995	
	Coefficient	Statistique t	Coefficient	Statistique t	Coefficient	Statistique t	Coefficient	Statistique t	Coefficient	Statistique t
<b>A. 0-14 ans</b>										
Coordonnée à l'origine	-2,168		-24,42		-1,358		-17,28		-0,820	
Âge de la famille										
Moins de 26 ans <sup>a</sup>										
27-34 ans	-0,746	-9,38	-0,757	-10,47	-1,095	-13,37	-0,923	-10,85	-0,663	-7,07
35-44 ans	-0,606	-7,97	-0,933	-12,74	-1,552	-18,61	-1,067	-12,67	-0,963	-10,34
45-54 ans	-0,259	-3,11	-0,582	-6,49	-1,165	-8,73	-0,951	-8,73	-0,662	-5,67
55 ans et plus	0,144	1,12	-0,303	-2,09	-1,525	-7,89	-1,304	-6,28	-0,909	-4,18
Études										
Primaires	0,849	19,47	0,982	19,03	0,765	11,07	0,710	8,75	0,541	5,74
Secondaires <sup>a</sup>										
Universitaires partielles / collégiales	-0,639	-8,07	-0,709	-10,41	-0,493	-8,03	-0,397	-6,83	-0,039	-0,67
Diplôme universitaire	-2,079	-12,27	-0,952	-10,25	-1,074	-11,99	-0,779	-9,50	-0,812	-9,09
Nombre d'enfants										
Un <sup>a</sup>										
Deux	0,340	4,40	0,215	3,40	0,287	4,20	0,067	1,06	0,236	3,59
Trois	0,900	11,36	0,779	11,43	1,013	13,34	0,628	8,90	0,420	5,48
Quatre ou plus	1,957	25,49	1,404	17,94	1,792	20,34	1,241	14,57	1,071	11,67
Type de famille / nombre de soutiens										
Un adulte, aucun soutien	4,372	24,26	4,167	25,54	4,010	26,28	2,343	29,39	2,314	26,15
Un adulte, un soutien	1,517	15,77	1,082	14,41	1,188	15,95	0,681	9,22	0,363	4,65
Deux adultes ou plus, aucun soutien	3,621	24,08	3,733	21,64	3,499	22,53	3,033	28,69	2,729	24,54
Deux adultes ou plus, un soutien										
Deux adultes ou plus, deux soutiens ou plus	-0,865	-19,31	-1,285	-26,55	-1,257	-23,24	-1,312	-22,61	-1,515	-25,13
Taille de l'échantillon	24 253		25 438		22 380		21 527		18 360	
Chi carré modèle	6253,40		6272,57		6501,76		5861,47		4799,58	
<b>B. 25-34 ans</b>										
Coordonnée à l'origine	-5,605	-21,19	-4,924	-29,91	-4,539	-31,39	-4,057	-32,56	-3,943	-29,04
Études										
Primaires	2,043	10,18	1,623	13,31	0,870	6,73	0,716	5,25	0,595	4,06
Secondaires	1,206	6,11	0,650	5,92	0,429	4,44	0,408	4,32	0,246	2,53
Universitaires partielles / collégiales	0,954	4,56	0,289	2,38	0,264	2,57	0,247	2,43	-0,060	-0,55



**Variations de la situation économique de différents groupes d'âge :  
revenu familial des particuliers redressé en fonction des équivalents-adultes**

1995	1994	1991	1990	1988	1986	1981	1973	1973	1981	1986	1988	1990	1991	1994	1995
Pourcentage en deçà de la moitié du															
revenu médian															
59,8	59,9	63,0	63,4	58,3	59,6	61,8	58,6	Revenu après impôts et transferts							
12,3	15,3	15,9	16,3	17,8	17,0	17,3	18,0	de 1991)							
100	124	129	133	145	138	141	146	Revenu médian indexé							
0,72	0,74	0,77	0,76	0,82	0,82	0,83	0,87	Revenu médian relatif							
Pourcentage en deçà de la moitié du															
25,3	19,4	9,7	10,7	7,3	5,0	4,0	3,6	revenu médian							
20 805	23 814	24 807	25 347	26 099	26 495	28 867	29 197	Nombre de personnes (en milliers)							
18,2	22,4	22,4	23,4	23,6	22,1	21,9	21,9	Revenu avant impôts et transferts							
de 1991)															
100	124	124	129	130	121	120	120	Revenu médian indexé							
1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	Revenu médian relatif							
Pourcentage en deçà de la moitié du															
21,5	21,1	24,4	23,8	24,2	25,6	26,4	26,2	revenu médian							
16,9	20,8	20,7	21,4	21,6	20,6	20,7	20,6	Revenu après impôts et transferts							
de 1991)															
100	123	122	126	127	122	122	122	Revenu médian indexé							
1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	Revenu médian relatif							
Pourcentage en deçà de la moitié du															
14,3	12,3	12,1	11,5	11,6	11,5	11,7	11,8	revenu médian							

**Variations de la situation économique de différents groupes d'âge :  
revenu familial des particuliers redressé en fonction des équivalents-adultes**

Tableau 2A.1

	1973	1981	1986	1988	1990	1991	1994	1995
<b>A. 0-14 ans</b>								
Nombre de personnes (en milliers)	5 900	5 306	5 270	5 338	5 467	5 552	5 852	5 867
Revenu avant impôts et transferts	16,2	20,4	20,9	21,4	21,5	20,3	20,3	20,1
Revenu médian (en milliers de dollars)	100	126	129	132	133	125	125	124
Revenu médian relatif	0,89	0,91	0,93	0,92	0,91	0,92	0,93	0,92
Pourcentage en deçà de la moitié du revenu médian	22,3	19,9	23,0	22,3	24,5	25,9	25,9	26,1
Revenu après impôts et transferts	14,9	18,6	18,7	19,1	19,2	18,5	18,5	18,3
Revenu médian indexé de 1991	100	125	126	128	129	124	124	123
Revenu médian relatif	0,88	0,89	0,90	0,89	0,89	0,90	0,89	0,89
Pourcentage en deçà de la moitié du revenu médian	17,3	14,5	15,0	14,7	15,6	15,4	15,3	15,7
<b>B. 25-34 ans</b>								
Nombre de personnes (en milliers)	3 053	4 169	4 478	4 581	4 640	4 624	4 864	4 783
Revenu avant impôts et transferts	21,7	25,1	24,6	25,6	25,0	23,6	24,5	23,6
Revenu médian indexé de 1991	100	116	113	118	115	109	113	109
Revenu médian relatif	1,19	1,12	1,09	1,09	1,06	1,07	1,12	1,08
Pourcentage en deçà de la moitié du revenu médian	11,9	14,0	18,0	16,9	18,0	20,1	19,5	18,7
Revenu après impôts et transferts	19,2	22,2	21,7	22,2	22,0	21,1	21,9	21,2
Revenu médian indexé de 1991	100	116	113	116	115	110	114	110
Revenu médian relatif	1,13	1,07	1,05	1,04	1,02	1,03	1,05	1,03
Pourcentage en deçà de la moitié du revenu médian	8,7	9,3	11,7	10,3	10,8	11,0	10,8	11,1
<b>C. 45-54 ans</b>								
Nombre de personnes (en milliers)	2 240	2 454	2 536	2 678	2 867	3 027	3 602	3 755
Revenu avant impôts et transferts	22,4	27,7	28,4	30,1	30,9	29,7	29,9	29,3
Revenu médian indexé de 1991	100	124	127	134	138	133	133	131
Revenu médian relatif	1,23	1,24	1,27	1,29	1,31	1,35	1,36	1,34
Pourcentage en deçà de la moitié du revenu médian	14,4	13,7	14,6	14,1	13,6	14,0	15,2	16,2
Revenu après impôts et transferts	20,1	24,8	24,6	25,9	26,5	25,6	25,5	25,2
Revenu médian indexé de 1991	100	123	122	129	132	127	127	125
Revenu médian relatif	1,19	1,19	1,19	1,21	1,23	1,24	1,23	1,22
Pourcentage en deçà de la moitié du revenu médian	10,1	9,0	9,0	8,2	8,1	8,0	8,5	9,3
<b>D. 65 ans et plus</b>								
Nombre de personnes (en milliers)	1 683	2 223	2 557	2 710	2 873	2 950	3 297	3 379
Revenu avant impôts et transferts	5,6	7,3	6,5	6,6	8,4	7,7	6,8	8,1
Revenu médian indexé de 1991	100	130	116	118	150	138	121	145
Revenu médian relatif	0,31	0,33	0,29	0,28	0,36	0,35	0,31	0,37

Analyse logistique des variations de la probabilité du faible revenu

Le texte qui suit décrit les méthodes d'estimation du modèle de régression logistique utilisé à la section 2 (la période 1981-1988 servant d'illustration). La fonction logistique prend la forme  $Y = 1/[1 + \exp(-\beta X)]$  où  $Y = 1$  si le revenu familial de l'enfant est inférieur à la moitié du revenu familial médian et  $Y = 0$  autrement. Si l'on transforme de la manière habituelle, l'équation estimée est  $L = \beta X + u$ , où  $L = \ln[P/(1-P)]$  est le logit,  $P = \Pr\{Y=1|X\}$ ,  $X$  est un vecteur de variables indépendantes et  $\beta$  est le vecteur des coefficients associés.

À partir de données de 1981, nous obtenons  $L_{81} = \beta_{81} X_{81} + u$ , puis nous calculons  $\hat{P}_{81}$ , soit la probabilité moyenne globale qu'un enfant ait un revenu familial inférieur à 0,5 de la médiane en 1981. Pour calculer cette probabilité, on pourrait simplement estimer la probabilité à la valeur moyenne des variables. Cependant, comme on fait appel à une fonction non linéaire, le résultat ne correspond habituellement pas à la moyenne dérivée des données brutes. Ainsi, on calcule la probabilité moyenne en estimant la probabilité que chaque enfant de l'échantillon ait un revenu familial inférieur à la moitié de la médiane, d'après l'équation de régression, puis on calcule la moyenne de ces probabilités pour l'ensemble des personnes comprises dans l'échantillon (selon les poids d'échantillonnage). De cette façon, la probabilité estimée au moyen de l'équation de régression correspond à la moyenne de l'échantillon tirée des données brutes.

Ainsi, 
$$\hat{P}_{81} = \frac{\sum_{i=1}^n w_i \hat{P}_{i,81}}{\sum_{i=1}^n w_i}$$
, où  $w_i$  représente le poids d'échantillonnage associé à l'individu  $i$ ,  $n$ , le nombre d'observations et  $\hat{P}_{i,81}$  la probabilité estimée pour l'individu  $i$  dans l'année 1981, calculée comme suit :

$$\hat{P}_{i,81} = \frac{1 + \exp(-\beta_{81} X_{i,81})}{2}$$

Pour décomposer la variation totale de  $P$  (de 1981 à 1988, par exemple) afin de connaître celle attribuable aux changements survenus dans la composition familiale (variations des variables indépendantes) et celle due aux changements survenus dans le risque de se trouver parmi la population à faible revenu étant donné un ensemble particulier de caractéristiques (variations des coefficients), il faut procéder comme suit :

[1] Modifier la composition des familles (les variables indépendantes), en maintenant la valeur des coefficients aux niveaux de 1981. Ainsi,  $L^* = \beta_{81} X_{88}$ . Nous calculons  $L^*$ , puis  $P^*$  comme ci-dessus. Puis  $P^* - \hat{P}_{81}$  équivaut à la variation de  $P$  observée entre 1981 et 1988 en raison de la variation de la composition des familles avec enfants.

[2] La valeur des coefficients est ensuite changée, celle de 1981 étant remplacée par celle de 1988. Ainsi,  $L_{88} = \beta_{88} X_{88}$  et  $P_{88}$  est calculé. Puis  $\hat{P}_{88} - P^*$  équivaut à la variation de  $P$  due au changement survenu dans le risque de se trouver parmi la population à faible revenu étant donné un ensemble particulier de caractéristiques familiales (autrement dit, au changement survenu dans les coefficients).

On n'obtient pas les mêmes résultats selon que les coefficients ou les valeurs des variables sont modifiés en premier, c'est pourquoi le calcul se fait selon les deux méthodes, la valeur moyenne des deux résultats étant retenue. De plus, la mise en garde habituelle concernant l'interprétation de tels résultats s'applique ici. Le modèle ne renferme aucun rapport comportemental explicite entre les deux facteurs de base (soit l'évolution démographique et la situation des enfants sur le plan du revenu au sein des groupes démographiques), bien qu'il en existe presque certainement dans les faits. Dans une certaine mesure, les variations de la situation économique des familles et celles de la composition familiale sont déterminées par les mêmes facteurs. Idéalement, on voudrait estimer l'incidence des changements exogènes liés à la démographie et au marché du travail sur la probabilité du faible revenu, mais le modèle est caractérisé par une certaine endogénéité. Si la situation économique se détériore, par exemple pour les jeunes familles peu scolarisées, ce facteur risque fort d'influencer la probabilité que ces familles aient des enfants et, partant, les caractéristiques démographiques des enfants. De plus, la diminution des gains des jeunes sur le marché du travail peut avoir incité de nombreux deuxièmes soutiens de jeunes familles à travailler eux aussi. Or, ces rapports ne sont pas pris en compte ici. Par conséquent, les résultats s'apparentent à une décomposition de l'histoire au sens comptable. Ils estiment l'incidence directe, mais non indirecte, de ces facteurs sur le faible revenu parmi les enfants au cours de la période. Le tableau 2A.1 présente les résultats complets des régressions logistiques.



une échelle d'équivalences particulière. Il existe plusieurs échelles d'équivalences, dont celles qui sont implicites dans l'établissement des seuils de faible revenu (SFR) de Statistique Canada. Nous utilisons l'échelle à « variante centrale » proposée par Wolfson et Evans (1992). Dans notre version, on attribue un poids de 1,0 au premier adulte et de 0,4 à chaque adulte supplémentaire. On attribue au premier enfant et à chaque enfant supplémentaire un poids de 0,3, soit dans les familles monoparentales, où l'on attribue au premier enfant un poids de 0,4.

Notre évaluation du « faible revenu » est fondée sur la mesure de faible revenu (MFR) correspondant à la moitié du revenu médian. Contrairement au SFR, la MFR est sensible aux variations de la répartition du revenu (inégalité), mais non à celles du niveau de revenu moyen (Wolfson et Evans, 1992; Sharif et Phipps, 1994). Nous nous concentrons sur l'incidence des mar- chés, des familles et des politiques sociales sur la répartition du revenu, et non sur son niveau. Toutefois, nous avons répété une grande partie de l'analyse en utilisant le SFR après impôts et des tendances analogues, mais des niveaux très différents de faible revenu. Chez les personnes de plus de 65 ans, par exemple, toutes les mesures indiquent un recul continu de l'incidence du faible revenu. En fonction du SFR avant impôts et après transferts, le faible revenu a pres- que diminué de moitié entre 1981 et 1995, passant d'environ 34 % à 18,7 %. Le SFR après impôts et transferts indique un recul plus pro- noncé : de 21,0 % en 1981 à 7,7 % en 1995. La réduction est encore plus spectaculaire en fonc- tion de la MFR : le faible revenu passe d'environ 20 % en 1981 à 3,6 % en 1995. Ces résultats s'apparentent aux conclusions de Wolfson et Murphy (1996), qui utilisent une mesure sembla- ble. Selon eux, cette valeur très faible de la fré- quence du faible revenu s'explique par le fait que le revenu tiré de la SV ou du SRG se situe juste au-dessus de la moitié du revenu médian re- dressé. Ainsi, même des variations minimes de la garantie que constitue le revenu tiré de la SV ou du SRG peuvent avoir une incidence impor- tante sur le nombre de personnes âgées dont le revenu est inférieur à la moitié du revenu mé- dian.

Quoi qu'il en soit, il n'est pas impossible qu'on puisse, dans un avenir rapproché, évaluer au système de transferts sociaux ont une inci- dence sur le revenu d'emploi, ou encore sur le niveau de faible revenu, à mesure que se feront sentir les effets des modifications apportées aux politiques sociales fédérales et provinciales. Il importera de suivre et d'expliquer l'incidence que les changements survenus dans le marché du travail et le système de transferts sociaux auront sur le faible revenu, afin de comprendre les ten- dances globales de la fréquence du faible revenu au cours des années à venir.

## Annexe

### Sources des données et définitions des variables

Nos données sont tirées de l'Enquête sur les fi- nances des consommateurs (EFC). Selon notre définition, le revenu gagné comprend les traite- ments et salaires, la solde des militaires, la ré- munération des travailleurs indépendants, le revenu de placement et les rentes provenant d'un régime privé. Les transferts sociaux comprennent les allocations familiales, les allocations aux jeu- nes, les prestations de la SV, le SRG, les presta- tions du RPC/RRQ, ainsi que les prestations d'assurance-chômage, le soutien du revenu, les crédits d'impôt provinciaux, les crédits d'impôt pour enfants, le crédit pour taxe fédérale sur les ventes, le crédit pour TPS et d'autres transferts gouvernementaux. Les crédits s'entendent avant impôts. L'impôt sur le revenu constitue une autre composante (négative) du revenu. L'EFC sous- estime les paiements de transferts, notamment ceux de l'assurance-chômage et le soutien du revenu. Toutefois, le degré de sous-estimation est uniforme dans le temps. Entre 75 % et 80 % des transferts gouvernementaux sont pris en compte dans le fichier de l'EFC pour les années étudiées. L'évaluation de l'incidence des trans- ferts est donc prudente, car nous sous-estimons son effet sur le revenu familial, mais elle est uni- forme dans le temps. Par contraste, les impôts exigibles déclarés dans l'EFC constituent 98 % de ceux qui sont déclarés par Revenu Canada. Notre calcul du revenu familial « redressé en fonction des équivalents-adultes » repose sur

### 3. Conclusion

La stabilité relative de la fréquence du faible revenu chez les enfants et les adultes d'âge actif au cours des années 80 a masqué un certain nombre de tendances sous-jacentes, plus difficiles à cerner. À mesure que les gains des jeunes, des travailleurs peu scolarisés et des personnes à faible revenu ont reculé au cours de la décennie, le marché du travail est devenu une source de revenu de moins en moins importante pour les familles à faible revenu. En fonction du seul revenu gagné, la fréquence du faible revenu a augmenté considérablement chez les enfants et les jeunes adultes au cours des années 80 et 90. Le risque accru de toucher un faible revenu a été compensé par deux facteurs : la majoration des paiements de transfert et les variations des caractéristiques des familles au sein desquelles vivent les Canadiens. Pendant les années 80 et au début des années 90, les paiements de transfert ont constitué une source croissante de revenu chez les Canadiens à faible revenu, alors que le revenu gagné a reculé et que les familles ont modifié leurs caractéristiques afin de réduire la fréquence du faible revenu.

Au cours des années 90, la situation a évolué. Les tendances de la structure familiale, qui avaient auparavant réduit le risque de toucher un faible revenu, se sont stabilisées ou se sont inversées, tandis que le nombre de familles monoparentales a continué d'augmenter. Le ratio emploi-population a diminué chez les hommes de tous âges et a cessé de progresser chez les femmes. Entre 1988 et 1995, les variations de la composition des familles ont accru d'environ 2 points le risque du faible revenu chez les enfants et les jeunes adultes.

Afin de réduire les déficits et d'intensifier les mesures d'incitation au travail, les gouvernements ont commencé à modifier le système de transferts sociaux pendant les années 90. Comme bon nombre de ces changements sont relativement récents, il est difficile de prévoir avec certitude quelles en seront les conséquences à long terme. Les réformes de l'aide sociale visent notamment à intensifier les mesures d'incitation au travail afin que les familles à faible revenu améliorent leur revenu grâce à des gains plus élevés. Plusieurs études portant sur la situation des mères de famille monoparentale ont conclu que l'augmentation des prestations d'aide sociale à la fin des années 80 avait eu une incidence importante sur le recours à l'aide sociale et la baisse de l'emploi au sein de ce groupe

(Charrette et Meng, 1994; Kapsalis, 1996; Dooley, 1994b). Il est supposé que la réduction des prestations aura pour effet d'inverser le processus. Bien qu'il soit prématuré de tirer des conclusions probantes à cet égard, rien ne semble encore témoigner d'un tel changement : les gains des familles à faible revenu, notamment les familles avec enfants, ont diminué considérablement depuis 1990. L'Enquête sur les finances des consommateurs de 1996 montre que les paiements de transfert aux familles comprises dans le quintile inférieur ont diminué de 3 % (Statistique Canada, 1997). L'augmentation des gains n'ayant pas compensé cette réduction, le revenu total moyen de ces familles a également reculé d'environ 3 %.

L'essentiel n'est pourtant pas de déterminer si les transferts sociaux créent des contre-indications au travail (ce qui est sans doute le cas), mais de savoir si leur ampleur suffit à expliquer le recul des gains des jeunes adultes (et, de façon plus générale, des travailleurs à faible revenu). Compte tenu d'un certain nombre de facteurs, il est peu probable que le recul du revenu d'emploi chez les familles à faible revenu soit principalement attribuable à l'augmentation des contre-incitations au travail que crée le système de transferts sociaux. Après avoir passé en revue les études portant sur l'offre de main-d'œuvre, Hum et Simpson (1991) concluent que cette offre réagit à peine au système de transferts fiscaux. On observe un recul des gains des jeunes adultes (qui sont les parents de la plupart des jeunes enfants) dans un certain nombre de pays dotés de systèmes de transferts sociaux très différents (Davis, 1992). En ce qui concerne les États-Unis, Moffitt (1992) conclut que si les programmes d'aide sociale entraînent une certaine contre-incitation au travail, l'absence de cette contre-incitation augmenterait très peu le revenu d'emploi des travailleurs et qu'en général, l'offre de main-d'œuvre est relativement insensible aux modifications éventuelles des politiques en matière d'aide sociale. Selon certains chercheurs, ce serait plutôt les variations de la demande de main-d'œuvre, peut-être liées aux changements survenus dans le commerce ou la technologie, qui expliqueraient les fluctuations de la courbe des gains dans bon nombre de pays développés, notamment le recul des gains chez les travailleurs à faible revenu et peu spécialisés (Katz et Murphy, 1992). Les variations de l'offre, liées aux fluctuations des mesures d'incitation à l'aide sociale ou à d'autres facteurs, sont considérées comme moins importantes.



Tableau 2.5  
Décomposition de la variation de la probabilité de se trouver  
dans la population à faible revenu

	65 ans et plus			(en points de pourcentage)		
	45-54 ans	25-34 ans	0-14 ans	45-54 ans	25-34 ans	0-14 ans
A. De 1973 à 1981						
	-5,9	+0,7	-2,8	-1,2	-1,6	-5,5
	-2,5	-1,8	-5,5	+0,6	+2,2	+2,7
B. De 1981 à 1988						
	-8,7	+1,0	+0,2	-0,8	-0,4	-1,7
	-3,7	-0,7	-1,7	-0,7	+1,4	+1,9
C. De 1988 à 1995						
	-7,1	+1,1	+1,0	+1,1	+0,8	+2,0
	-2,7	+0,6	+2,0	+0,6	+1,5	+1,0
	-4,4	+0,5	-1,0	+0,5	-0,7	-1,0

exemple, est sans doute attribuable en partie à la récession. Toutefois, en 1995, l'économie était en pleine reprise et l'on pouvait s'attendre à ce que les ratios emploi-population reviennent à leurs niveaux d'avant la récession. Pourtant, il n'en a rien été en 1995 ni en 1996<sup>5</sup>. Mais surtout, les variations importantes qui ont protégé les enfants contre le risque du faible revenu pendant les années 70 et 80 ne sauraient avoir la même incidence à l'avenir. Les tendances à long terme, comme la diminution de la taille des familles et la hausse du taux d'activité des femmes, ont des limites supérieure et inférieure. Il s'agit de phénomènes ponctuels qui ne pourront se répéter à l'avenir. La réduction future de la fréquence du faible revenu chez les enfants dépendra plutôt—et surtout—de la capacité accrue de leurs parents (de jeunes adultes) à gagner de leur vie ou de l'amélioration des transferts sociaux. Contrairement à ce qui est le cas chez les jeunes, les variations de la composition des familles chez les personnes âgées—notamment les niveaux d'instruction supérieurs et l'accès amélioré aux régimes de retraite de l'État et du secteur privé—ont réduit le risque de toucher un faible revenu pendant les trois périodes et ce, dans une mesure assez importante : de 2,7 points dans les années 70, de 3,7 points dans les années 80 et de 2,7 points dans les années 90.

On observe une inversion semblable, quoique moins spectaculaire, chez les adultes d'âge actif. Après avoir plutôt réduit la fréquence du faible revenu pendant les années 80, les variations de la composition des familles (notamment l'activité sur le marché du travail) ont tendance à accroître la probabilité de toucher un faible revenu au cours des années 90. L'incidence est forte chez les adultes de 25 à 34 ans (environ 1,5 point), mais très modeste chez les personnes d'âge moyen.

Certains changements survenus pendant les années 90 pourraient s'avérer temporaires. Le recul de l'emploi chez les adultes d'âge actif, par



Tableau 2.4

Distribution des particuliers, 65 ans et plus, selon les caractéristiques démographiques et relatives au marché du travail

	1973	1981	1986	1988	1994	1995
--	------	------	------	------	------	------

Études <sup>1</sup>	57,5	49,9	44,2	42,9	37,2	37,1
Primaires						
Secondaires	31,0	35,0	37,2	37,5	42,5	42,9
Postsecondaires partielles	8,7	9,7	12,1	11,9	12,8	11,6
Diplôme universitaire	2,7	5,4	6,5	7,7	7,6	8,4

Nombre d'adultes dans la famille <sup>2</sup>	27,2	32,2	30,8	32,2	31,7	30,9
Un						
Deux	51,3	48,6	50,8	51,3	53,6	55,0
Trois ou plus	21,5	19,2	18,4	16,5	14,7	14,0

Nombre de soutiens						
Aucun	58,0	65,0	69,4	71,1	74,4	73,1
Un ou plus	42,0	35,0	30,6	28,9	25,6	26,9

Nombre de personnes dans la famille						
bénéficiant du RPC/RRQ	70,5	36,5	26,7	21,9	11,3	11,3
Aucun						
Une	27,1	52,6	57,3	56,5	57,5	56,2
Deux ou plus	2,4	11,0	16,0	21,6	31,2	32,4

Nombre de personnes dans la famille						
bénéficiant d'un régime de retraite privé <sup>3</sup>	71,1	63,1	55,3	52,3	46,0	45,3
Aucune						
Une ou plus	28,9	36,9	44,7	47,7	54,0	54,7

<sup>1</sup> Niveau d'instruction du membre de la famille ayant les gains (ou la pension) les plus élevés.  
<sup>2</sup> Famille économique, les personnes seules étant considérées comme une famille.  
<sup>3</sup> Y compris les rentes constituées au moyen d'un REER.

1973 à 1981, marquée par une hausse particulièrement forte du taux d'activité des femmes; celle de 1981 à 1988, qui représente les variations sur un cycle économique complet (d'un sommet à l'autre); celle de 1988 à 1995, qui représente les changements depuis le sommet du dernier cycle économique.

Nous utilisons la régression logistique pour décomposer les changements survenus dans la probabilité de toucher un faible revenu en deux parties : celle qui est attribuable aux variations de la composition et celle qui est attribuable aux variations du risque de toucher un faible revenu s'il est lié à une caractéristique donnée. La variable dépendante prend la valeur 1 si la personne touche un revenu inférieur à la moitié du revenu médian (revenu de tous les individus compris dans la population), et 0 dans le cas contraire. Les variables indépendantes, qui définissent les dimensions des variations de la composition, ressemblent aux variables présentées dans les tableaux 2.1 à 2.4. Nous n'utilisons pas les variables exactement de la manière indiquée dans ces tableaux, car certaines combinaisons de ces

variables ne sont pas définies, notamment la présence de deux soutiens adultes et plus dans une famille monoparentale. On trouvera en annexe plus de détails sur la méthodologie, ainsi que la définition des variables et les résultats de la régression.

Selon les résultats présentés dans le tableau 2.5, les variations de la composition des familles au cours des années 90 ont accru le risque de toucher un faible revenu. Pendant les années 70 et 80, elles ont réduit la probabilité de toucher un faible revenu pour tous les groupes d'âge. Les changements survenus dans le comportement des adultes d'âge actif, surtout aux chapitres de la fécondité et du travail, ont atténué le risque de toucher un faible revenu (à hauteur du nombre de points indiqué dans le tableau). Par contraste, au cours des années 90, l'incidence est positive pour tous les groupes (sauf celui des personnes âgées), ce qui indique que les changements survenus dans la composition des familles ont accentué le risque de toucher un faible revenu.

L'incidence de ces changements est particulièrement frappante dans le cas des enfants.

**Tableau 2.2**  
**Distribution des particuliers, 25-34 ans,**  
**selon les caractéristiques démographiques et relatives au marché du travail**

	1973	1981	1986	1988	1994	1995
Études <sup>1</sup>						
Primaires	20,4	12,0	9,3	9,3	6,8	6,5
Secondaires	46,8	46,3	47,7	46,2	46,6	46,4
Postsecondaires partielles	20,4	24,8	26,1	28,3	27,8	27,6
Diplôme universitaire	12,4	16,8	17,0	16,2	18,9	19,4
Nombre d'enfants						
Aucun	31,1	40,8	47,3	47,8	51,8	53,1
Un	20,4	21,5	19,2	19,2	19,4	18,3
Deux	29,5	26,7	23,0	23,8	20,7	20,2
Trois ou plus	19,0	11,0	10,4	9,1	8,1	8,4
Nombre de soutiens <sup>2</sup>						
Aucun	2,5	2,8	4,3	3,4	6,2	5,7
Un	47,8	38,7	34,8	32,8	33,3	34,7
Deux ou plus	49,8	58,6	60,9	63,7	60,5	59,6
Situation familiale						
Personne seule	8,5	14,2	16,3	17,1	17,9	19,0
Parent seul	2,4	2,9	3,2	3,3	4,3	4,2
Deux adultes ou plus	89,1	82,9	80,5	79,6	77,8	76,8
Niveau d'instruction du membre de la famille économique ayant les gains les plus élevés.						
<sup>2</sup> Nombre de soutiens dans la famille économique.						

**Tableau 2.3**  
**Distribution des particuliers, 45-54 ans,**  
**selon les caractéristiques démographiques et relatives au marché du travail**

	1973	1981	1986	1988	1994	1995
Études <sup>1</sup>						
Primaires	38,1	32,3	24,6	22,6	13,1	13,7
Secondaires	42,9	42,2	43,2	42,0	47,5	46,2
Postsecondaires partielles	12,3	14,6	16,7	18,5	19,6	20,3
Diplôme universitaire	6,7	10,9	15,5	16,9	19,7	19,8
Nombre d'enfants (0-14 ans)						
Aucun	56,0	71,5	76,9	79,0	80,0	79,7
Un	23,1	19,4	16,0	13,7	12,9	13,8
Deux	12,5	6,4	5,1	5,5	5,4	5,2
Trois ou plus	8,5	2,6	2,0	1,8	1,5	1,3
Nombre de soutiens <sup>2</sup>						
Aucun	4,1	4,2	4,8	5,2	6,3	6,3
Un	31,6	24,5	22,7	20,9	23,9	24,3
Deux ou plus	64,3	71,2	72,4	73,9	69,6	69,3
Situation familiale						
Personne seule	6,3	7,9	9,4	10,8	11,9	12,4
Parent seul	0,5	0,6	0,8	0,7	0,9	1,2
Deux adultes ou plus	93,1	91,5	89,8	88,4	87,0	86,5
Niveau d'instruction du membre de la famille économique ayant les gains les plus élevés.						
<sup>2</sup> Nombre de soutiens dans la famille économique.						

[4] Le nombre d'enfants vivant dans une famille (économique) monoparentale a augmenté tout au long de la période, passant de 4,6 % en 1973 à 9,8 % en 1988, puis à 12,7 % en 1995<sup>3</sup>.

Dans l'ensemble, ces tendances ont réduit la probabilité que les enfants fassent partie d'un ménage à faible revenu au cours des années 70 et pendant une grande partie des années 80.

Chez les adultes de 25 à 34 ans, les tendances sont semblables à celles qu'on observe chez les enfants, ce qui n'a rien d'étonnant, puisqu'un bon nombre de ces personnes sont des parents. Mais surtout, la proportion des adultes de 25 à 34 ans (y compris les personnes seules) vivant dans une famille à deux soutiens et plus a culminé à 63,7 % en 1988, avant de tomber à 59,6 % en 1995. La proportion des personnes seules et des parents seuls a aussi continué d'augmenter pendant les années 90 (tableau 2.2). Comme dans le cas des enfants, les variations des facteurs démographiques et de l'offre de main-d'œuvre n'ont pas exercé de pression à la baisse sur le faible revenu au cours des années 90; elles ont plutôt eu l'effet contraire, comme nous le verrons plus loin.

Dans la population d'âge moyen, les variations des caractéristiques des familles et des trajectoires ont été moins spectaculaires que dans les groupes d'âge plus jeunes. Le niveau d'instruction a augmenté au cours des années 90 et continue de progresser. Toutefois, comme dans les groupes d'âge plus jeunes, la proportion des adultes de 45 à 54 ans vivant dans une famille à deux soutiens a plafonné en 1988 (tableau 2.3).

[1] Le niveau d'instruction des personnes âgées a augmenté régulièrement tout au long de la période et continuera de progresser avec le vieillissement des cohortes plutôt qu'avec l'instruction des familles qui ont à leur tête une personne n'ayant fait que des études primaires est passée de 58 % en 1973 à 37 % en 1995 (tableau 2.4).

[2] La proportion des personnes âgées qui vivent dans une famille bénéficiant d'au moins un régime de retraite privé a augmenté considérablement, passant de

[3] Le régime de pension public étant arrivé à maturité, la proportion des personnes âgées qui vivent dans une famille bénéficiant de prestations du RPC ou du RRQ est passée de 29,5 % en 1973 à 88,6 % en 1995. Dans les familles où deux personnes et plus reçoivent ce genre de prestations, la proportion a aussi grimpé de façon spectaculaire, passant de 2 % en 1973 à 22 % en 1988, puis à 32 % en 1995. Ce facteur aurait également tendance à exercer une pression continue à la baisse sur le faible revenu tout au long de la période.

[4] Par contraste, la proportion des personnes âgées qui vivent dans une famille comptant au moins un soutien est passée de 42 % en 1973 à 27 % en 1995; ce recul pourrait accroître le risque de toucher un faible revenu. Pour isoler l'influence des variations de la structure familiale sur la probabilité de toucher un faible revenu, nous décomposons les changements survenus dans cette probabilité en deux parties : celle qui est attribuable à la variation des caractéristiques des familles (niveau d'instruction plus élevé, plus de parents seuls, moins d'enfants, plus de soutiens de famille) et celle qui est attribuable aux changements survenus dans le risque qu'un membre d'une famille pré sente un ensemble donné de caractéristiques touche un faible revenu.

Par exemple, le risque de toucher un faible revenu est habituellement plus élevé chez les membres d'une famille dont le principal soutien est peu instruit, donc moins capable de bien gérer sa vie. Ainsi, un changement dans la composition du niveau d'instruction des familles d'une génération donnée peut modifier la fréquence globale du faible revenu. Toutefois, le risque de toucher un faible revenu, étant donné un niveau d'instruction particulier, peut également changer. Ainsi, les gains relatifs peuvent diminuer ou le chômage peut s'aggraver chez les personnes peu instruites, en réaction au recul de la demande pour leurs compétences. Nous évaluons l'incidence de ces deux facteurs.

Comme nous l'avons mentionné plus haut, le rythme et l'orientation des variations ont beaucoup varié au cours de la période allant de 1973 à 1995. Pour cerner ces écarts, nous avons réparti notre analyse sur trois périodes : celle de



Tableau 2.1  
Distribution des particuliers, 0-14 ans, selon les caractéristiques familiales

	1973	1981	1986	1988	1994	1995
Âge du chef de famille <sup>1</sup>						
Moins de 26 ans	9,1	9,3	7,4	6,8	6,0	5,7
27-34 ans	28,9	36,1	35,4	34,9	32,3	31,4
35-44	42,6	41,1	45,4	47,0	49,0	50,1
45-54	16,4	11,3	9,7	9,5	11,0	11,1
55 ans et plus	3,1	2,2	2,0	1,7	1,8	1,7
Études <sup>2</sup>						
Primaires	31,1	18,6	11,5	10,4	6,3	5,7
Secondaires	46,4	47,4	47,9	46,8	50,1	50,5
Postsecondaires partielles	14,2	20,5	22,4	25,2	25,9	26,2
Diplôme universitaire	8,3	13,5	18,2	17,6	17,7	17,7
Nombre d'enfants						
Un	17,2	24,5	24,5	24,5	25,6	26,3
Deux	35,0	44,6	45,0	46,9	45,5	44,9
Trois	24,9	22,1	22,7	20,7	20,8	20,7
Quatre ou plus	22,9	8,8	7,8	8,0	8,1	8,2
Situation familiale/Nombre de soutiens						
Parent seul/Aucun soutien	1,9	2,5	3,3	3,4	5,4	5,1
Parent seul/Un soutien	2,7	4,6	5,2	6,2	7,4	7,6
Deux parents/Aucun soutien	2,4	1,7	2,7	1,9	3,6	3,5
Deux parents/Un soutien	45,6	32,4	26,5	22,0	20,6	20,8
Deux parents/Deux soutiens	47,4	58,7	62,3	66,4	63,0	63,0

<sup>1</sup> L'adulte ayant les gains les plus élevés.

<sup>2</sup> Niveau d'instruction du membre de la famille économique ayant les gains les plus élevés.

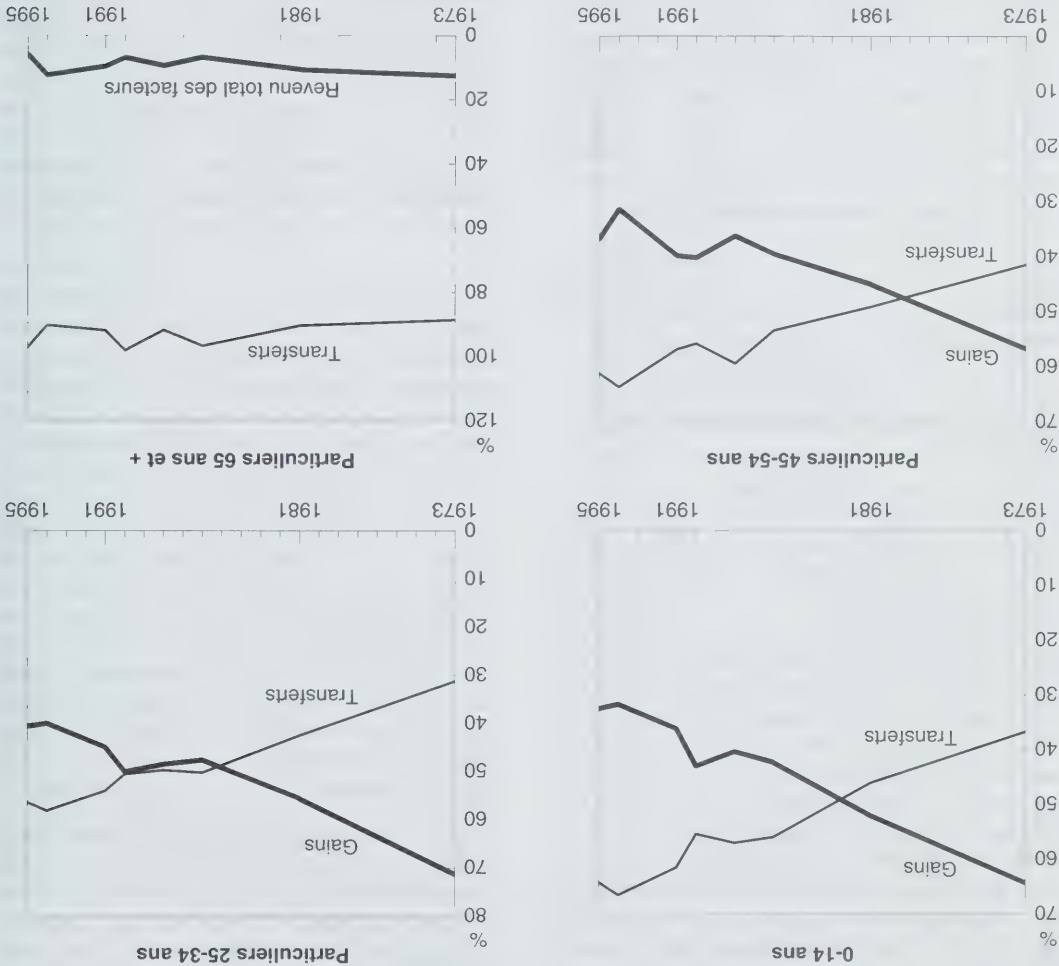
En ce qui concerne les enfants :

- [1] La proportion des enfants vivant dans une famille dont le principal soutien détenait un diplôme universitaire est passée de 8,3 % en 1973 à un sommet de 18,2 % en 1986, avant de tomber à 17,7 % en 1995 (tableau 2.1). Ainsi, la capacité de ces familles de gagner leur vie (capacité tributaire du niveau d'instruction) a progressé jusqu'au milieu des années 80, mais pas depuis.
- [2] Entre 1973 et 1981, le nombre d'enfants par famille a diminué, par conséquent, moins de personnes partagent le revenu familial, ce qui réduit le risque de faible revenu. Mais ce nombre est demeuré plus ou moins constant depuis.
- [3] La proportion des enfants vivant dans une famille à deux soutiens et plus a fortement progressé entre 1973 et 1988 (passant de 47 % à 66 %), avant de tomber à 63 % en 1995, le taux d'activité des hommes ayant reculé et celui des femmes s'étant stabilisé.

Tous ces changements ont eu pour effet de réduire le taux de faible revenu (notamment chez les enfants) et, jusqu'à récemment, ont largement compensé l'effet du nombre croissant de familles monoparentales.

Doolley (1991, 1994a) et Picot et Myles (1996) au Canada, de même que Gottschalk et Danziger (1993) aux États-Unis, ont montré que les variations des caractéristiques de la famille avaient eu une incidence considérable sur la fréquence du faible revenu au cours des années 70 et 80. Nous étendons leurs travaux aux années 90. Tout au long des années 80, les variations des caractéristiques des ménages aux chapitres de la démographie et du marché du travail ont, en règle générale, réduit le risque du faible revenu chez les enfants et les jeunes adultes. Depuis la fin des années 80, toutefois, bon nombre de ces tendances (notamment le taux d'activité des femmes) se sont stabilisées, et d'autres (la proportion des familles à deux soutiens et plus) se sont inversées. Les tableaux 2.1 à 2.4 présentent un certain nombre de points saillants.

Graphique 2.2  
Sources de revenu familial disponible pour différentes générations :  
personnes ayant un revenu inférieur à la moitié du revenu médian,  
1973 à 1975



Nota : Le revenu familial par personne est redressé en fonction des équivalents-adultes.

## 2. Évolution des familles et risque de toucher un faible revenu

Les transferts sociaux n'ont pas été le seul facteur à atténuer la situation des Canadiens à faible revenu au cours des vingt dernières années. Les types de familles au sein desquelles vivent les Canadiens en 1995 sont très différents de ceux des années 70 et, jusqu'à récemment, cette évolution a plutôt freiné la croissance du taux de faible revenu chez les adultes d'âge actif et leurs enfants. Depuis le début des années 70, les jeunes adultes canadiens se marient plus tard et ont moins d'enfants, et le taux d'activité des Canadiennes a progressé de façon spectaculaire.

à porter fruit. Enfin, l'évolution des comportements sur les plans de la procréation et du travail, qui a contribué à compenser la hausse des taux de faible revenu pendant les années 80, s'est peut-être infléchie (Picot et Myles, 1996). Dans une prochaine étude, nous évaluerons ces trois hypothèses. Pour le moment, nous nous concentrons sur la troisième et nous montrons qu'au cours des années 90, on ne peut s'inspirer uniquement de changements d'ordre démographique pour trouver des solutions à l'accroissement du risque de toucher un faible revenu.

découle principalement de l'évolution des marchés, et non de celle des familles. Comme l'attestent une foule d'autres, les salaires et les gains relatifs des jeunes adultes ont accusé une forte baisse après 1980 (Morissette, Myles et Picot, 1995; Picot, 1998; et le chapitre 3 par Morissette). Et, comme nous le montrerons plus loin, les variations de la structure familiale tendent à réduire, plutôt qu'à accentuer, l'incidence du recul des salaires sur le taux de faible revenu. Malgré le risque accru de toucher un faible revenu, les taux réels de faible revenu (après transferts et impôts) dans ces groupes d'âge sont demeurés relativement stables. Entre 1981 et 1995, la fréquence du faible revenu a augmenté respectivement de 1,2 et de 1,8 point chez les jeunes adultes et chez les enfants, et de moins de 1 point chez les adultes de 45 à 54 ans. Pendant la même période, l'écart entre le taux de faible revenu avant et après impôts et transferts a progressé de 5 points chez les enfants, de 3 points chez les adultes de 25 à 34 ans et de 2,5 points chez ceux de 45 à 54 ans<sup>2</sup>. Ce creusement de l'écart entre le taux de faible revenu gagné et le revenu après impôts et transferts montre le rôle accru que joue le système de transferts sociaux, du moins jusqu'au début des années 90, pour maintenir le revenu de ces groupes d'âge.

Depuis les années 70, ces variations ont eu pour conséquence importante une convergence croissante des sources de revenu des jeunes générations et des générations plus âgées au sein de la population à faible revenu (graphique 2.2). Au début des années 70, peu de personnes âgées à faible revenu tiraient la plus grande partie (environ 90 %) de leur revenu des transferts sociaux. Par contraste, les transferts sociaux comptaient pour un peu plus du tiers du revenu des enfants et des adultes à faible revenu, les deux autres tiers provenant d'un emploi et d'autres sources liées au marché. Au cours des années 90, les transferts sociaux ont joué un rôle beaucoup plus important. Aujourd'hui, environ 60 % du revenu touché par les adultes d'âge actif et les enfants des ménages à faible revenu proviennent du régime fiscal et du système de transferts, et environ 40 % proviennent du marché.

Pour bien des observateurs, les taux de faible revenu sont des indicateurs du rendement des politiques sociales. À cet égard, nos résultats témoignent de deux grandes réalisations du dernier quart de siècle : [1] un recul à long terme important et soutenu du faible revenu chez les

personnes âgées, et [2] des taux de faible revenu relativement stables chez les adultes d'âge actif et leurs enfants, malgré le risque croissant de toucher un faible revenu gagné. Toutefois, la réalité est nettement plus complexe que cette simple comptabilité ne le laisse entendre, puisqu'une incidence des politiques publiques sur les gains obtenus grâce au marché du travail n'est pas prise en compte. Cette incidence est multiforme : elle s'exerce sur les taux de chômage, les structures salariales, les perspectives d'adaptation, et de formation, et par le biais des contre-incitations au travail que créent les transferts sociaux. Les résultats que nous présentons portent en fait sur le système de transferts sociaux. Les critiques conservateurs du système de transferts concluront sans doute qu'en créant des contre-incitations au travail, les transferts sociaux sont, en fait, la cause de l'aggravation du risque de toucher un faible revenu chez les adultes d'âge actif et leurs enfants. Leurs adversaires souligneront le rôle que joue le recul de la demande de travailleurs peu spécialisés à faible revenu, allié à l'attention insuffisante accordée aux études et à la formation et, plus récemment, aux compressions subies par le système de transferts sociaux.

Dans un cas comme dans l'autre, toutefois, l'exposé historique que nous présentons est très éloquent. Comme la plupart des pays occidentaux, le Canada a réduit considérablement le taux de faible revenu des personnes âgées. Et, comme la plupart des pays européens, il a stabilisé le taux de faible revenu des adultes d'âge actif et de leurs enfants, du moins jusqu'en 1994. Il reste à savoir si cette tendance se maintiendra à l'avenir. En général, les taux de faible revenu reflètent le cycle économique. Au cours des années 90, les taux de faible revenu ont augmenté au début de la récession de 1990, puis ont baissé jusqu'en 1994. Malgré la reprise soutenue, toutefois, les taux de faible revenu ont remonté en 1995 et 1996 (Statistique Canada, 1997). Plusieurs facteurs peuvent expliquer ce phénomène. D'abord, les salaires et les perspectives d'emploi des adultes à faible revenu peuvent s'être détériorés malgré l'amélioration de la conjoncture économique dans son ensemble. Ensuite, les efforts du gouvernement pour restreindre le taux de croissance des dépenses sociales (notamment aux chapitres de l'assurance-chômage et du soutien du revenu) ont peut-être commencé



Graphique 2.1  
Proportion des personnes dont le revenu est inférieur à la moitié du revenu  
médian, avant et après impôts et transferts, 1973 à 1995



## 1. Transferts sociaux, revenu gagné et faible revenu

Nos données sont tirées du fichier des familles économiques de l'Enquête sur les finances des consommateurs (EFC) pour les années 1973, 1981, 1986, 1988, 1990, 1991, 1994 et 1995. Pour évaluer les tendances du faible revenu, nous utilisons une mesure de faible revenu correspondant à la moitié du revenu médian. Ainsi, nous calculons pour chaque famille un revenu par personne, attribué à chaque membre de la famille. Nous corrigeons ensuite cette valeur par personne pour tenir compte des économies d'échelle liées à la taille et à la composition de la famille, ce qui permet d'attribuer à chaque personne un revenu familial « redressé en fonction des équivalents-adultes ». Notre mesure du faible revenu correspond à la moitié de ce revenu familial, la médiane étant calculée pour l'ensemble des particuliers (et non des familles) du Canada. On trouvera plus de détails dans l'annexe.

Nous comparons d'abord le taux de faible revenu en fonction du seul revenu gagné (avant transferts et impôts) au taux de faible revenu en fonction du revenu disponible final (après transferts et impôts). On considère souvent que les tendances du taux avant transferts et impôts ont pour effet d'indexer le « risque » fluctuant de tout cher un faible revenu qui guette les particuliers et les familles sur le marché du travail et que l'écart entre les deux taux mesure l'« efficacité » avec laquelle le système de transferts atténue ce risque (McFate, Smeeding et Rainwater, 1995). Toutefois, l'évaluation du rôle que joue l'évolution du marché du travail et des systèmes de transferts sociaux dans la détermination du bien-être économique des Canadiens est nettement plus complexe que cette simple comptabilité ne le laisse entendre. En particulier, la réaction comportementale aux changements apportés au système de transferts sociaux peut avoir une incidence sur le niveau du revenu gagné, aspect que nous aborderons plus loin.

Le graphique 2.1 montre les tendances de faible revenu par cohorte d'âge. Dans le cas des personnes âgées, ces tendances découlent en grande partie de faits économiques et politiques survenus bien avant 1973. Au Canada, comme dans tous les pays occidentaux, la situation économique relative des personnes âgées s'est continuellement détériorée de la fin de la Seconde Guerre mondiale jusqu'aux années 60, lorsque les gouvernements ont accordé la priorité à la pauvreté des aînés<sup>1</sup>, surtout à cause de l'augmentation du nombre de retraités et de

l'absence d'un système développé de revenu de retraite. En 1946, juste après la guerre, près de la moitié (48 %) des hommes de plus de 65 ans étaient encore actifs. En 1973, la proportion avait chuté à 18 %, et le taux de faible revenu des personnes âgées, avant impôts et transferts, atteignait 60 %; il est demeuré relativement inchangé depuis. Par contraste, le taux de faible revenu après impôts et transferts n'a cessé de reculer, passant de 25 % en 1973 à moins de 4 % en 1995.

Au volet D du graphique 2.1, la distance entre les deux lignes témoigne des variations remarquables de l'écart entre la fréquence du faible revenu chez les personnes âgées avant et après impôts et transferts. L'écart est de 35 points en 1973, mais grimpe à 55 points en 1995. Ces changements sont attribuables en grande partie aux réformes des années 60—l'adoption du Régime de pensions du Canada (RPC) et du Régime de rentes du Québec (RRQ) en 1965 et du Supplément de revenu garanti l'année suivante—et à l'expansion de la protection offerte par les régimes de retraite privés. Si le revenu moyen des personnes âgées reste inférieur à celui du reste de la population (87 % du revenu médian en 1995), il a lui aussi marqué une hausse importante depuis 1973 (année où il atteignait 72 % du revenu médian). (Pour plus de détails, voir le tableau 2A.1 de l'annexe.)

Alors que chez les personnes âgées, le taux de faible revenu gagné est relativement stable depuis les années 70, il a augmenté considérablement chez les adultes d'âge actif et leurs enfants (graphique 2.1). Cette tendance à la hausse est particulièrement prononcée chez les enfants et les jeunes adultes. Ces deux groupes d'âge enregistrent habituellement des tendances parallèles puisque les premiers sont, de façon disproportionnée, les enfants des seconds. Chez les personnes de 25 à 34 ans, le taux de faible revenu avant impôts et transferts est passé de 14 % en 1981 à environ 19 % en 1995; chez les enfants, il est passé de 20 % à 26 %. Chez les personnes d'âge moyen, enfin, le taux est resté assez stable durant les années 80, mais il a grimpé d'un peu plus de deux points au cours de la présente décennie.

Les fluctuations du taux de faible revenu gagnés des adultes d'âge actif et de leurs enfants peuvent s'expliquer par les variations du comportement des jeunes adultes à l'égard du travail ou de la procréation, ou des deux. La détérioration de la situation des jeunes adultes d'âge actif et de leurs enfants depuis 1980

politiques.

Toutefois, nos résultats donnent également à penser que les retombées de la récession du début des années 90 pourraient s'avérer plus graves. Les niveaux de faible revenu ont augmenté lorsque la récession a commencé en 1990, puis ont diminué légèrement jusqu'en 1994. Contre toute attente, cependant, la tendance à la baisse ne s'est pas maintenue en 1995, ni (comme l'indiquent les résultats

Nous montrons que cette stabilité relative des taux de faible revenu chez les enfants et les adultes d'âge actif découle de deux faits. Premièrement, les paiements de transfert du gouvernement aux familles d'âge actif, notamment aux familles avec enfants, se sont fortement accrus. Deuxièmement, les jeunes adultes ont modifié leur comportement aux chapitres de la famille et du travail, ce qui a compensé en grande partie les conséquences du recul des gains. Ils ont commencé à se marier plus tard et à avoir moins d'enfants, et les femmes sont devenues plus nombreuses à travailler à l'extérieur du foyer. Bref, les familles et les gouvernements ont réagi aux nouveaux risques économiques caractérisant le marché du travail. Mais le phénomène joue dans les deux sens, et les tendances du marché du travail peuvent avoir constitué en partie une réaction aux modifications apportées au système de transferts sociaux et à d'autres

Par contraste, les tendances récentes du faible revenu chez les enfants et les adultes d'âge actif sont attribuables à des faits survenus depuis 1973. Au cours des années 70, la forte croissance dont les familles d'âge actif avaient bénéficié pendant les années 50 et 60 a commencé à décliner. Mais surtout, l'inégalité dans la répartition des gains réalisés sur le marché du travail s'est accentuée, notamment après 1980 (Morissette, Myles et Picot, 1995). Ce fait a entraîné, entre autres conséquences, un recul important des gains des jeunes adultes et les a exposés, ainsi que leurs enfants, à un plus grand risque de toucher un faible revenu. Jusqu'à récemment, toutefois, et contrairement à ce que l'on constate aux États-Unis, l'intensification du risque ne s'est pas traduite par une hausse des taux de faible revenu. Des années 70 jusqu'à la fin des années 80, la fréquence du faible revenu chez les personnes d'âge actif et leurs enfants a été remarquablement stable : elle augmentait en période de récession, mais reculait en période de reprise économique.

En somme, des années 60 aux années 90, les tendances de la fréquence du faible revenu au sein des diverses générations se sont profondément transformées. À cause de leur relation changeante avec le marché du travail, les personnes âgées ont été le point de mire principal, mais non exclusif, des politiques sociales au cours des années 60. Depuis les années 80, l'incapacité croissante sur le marché du travail a mis en évidence les nouveaux risques économiques qui guettent les jeunes générations, et particulièrement les enfants. L'objet du présent chapitre est d'éclairer le sujet par une description empirique et historique de cette évolution.

Les variations des tendances et des politiques constituant une autre réalité des années 90 pourraient avoir une incidence sur les tendances futures de la fréquence du faible revenu. Le pourcentage des chômeurs canadiens qui touchent des prestations de chômage est passé de 86,8 % en 1990 à 48,1 % en 1996. Bien des provinces ont réduit leur taux de soutien du revenu, de façon importante dans certains cas (Conseil national du Bien-être, 1997). La majorité de la prestation fiscale pour enfants (maintenant 47-pourcentage) nationale pour enfants) peut avoir compensé ces tendances pour les familles avec enfants. Tout compte fait, les résultats de 1995 montrent un léger recul de la moyenne des paiements de transfert, et les données provisoires de 1996 laissent entrevoir le maintien de cette tendance (Statistique Canada, 1997). Mais les modifications apportées au système de transferts sont trop récentes pour qu'on puisse tirer des conclusions probantes à l'égard de leurs conséquences. Nous ne pouvons pas non plus prévoir dans quelle mesure la réaction comportementale à ces modifications est susceptible de se traduire par un accroissement de l'effort de travail chez les personnes visées par les nouvelles politiques sociales des années 90.

provisoire(s) en 1996, même si la reprise s'est poursuivie. Ce phénomène s'explique, entre autres, par le fait que le comportement familial, dans les variations avaient partiellement compensé le recul du revenu gagné par le passé, à vu son évolution freinée, voire inversée. Dans une certaine mesure, on pouvait s'y attendre : les jeunes adultes ne peuvent pas continuer indéfiniment à repousser l'âge auquel ils ont leur premier enfant ni à réduire les taux de fécondité. Par contre, la baisse de l'activité sur le marché du travail (notamment chez les hommes) et du nombre de familles à deux soustiens, depuis 1990, était en grande partie inattendue.



# Chapitre 2

## Marchés, familles et transferts sociaux : tendances du faible revenu chez les jeunes et les personnes âgées, 1973-1995

GARNETT PICOT, JOHN MYLES ET WENDY PYPER

Comme les citoyens de tous les pays développés à économie de marché, les Canadiens comptent, pour leur bien-être économique, sur trois grandes institutions : le marché (notamment le marché du travail), leur famille et l'État (les administrations fédérale, provinciale et municipale). Les fluctuations du bien-être économique sont donc attribuables : [1] aux facteurs économiques ayant une incidence sur l'offre d'emplois, le revenu d'emploi et d'autres sources de revenu gagné; [2] aux facteurs « démographiques » ayant une incidence sur les types de familles au sein desquelles vivent les Canadiens (nombre de soutiens, nombre d'enfants); [3] aux facteurs politiques ayant une incidence sur le type et l'importance des paiements de transfert que l'État verse aux particuliers et aux familles.

Dans le présent chapitre, nous étudions les tendances des transferts sociaux, du revenu gagné et de la composition des familles de 1973 à 1995, ainsi que leur influence sur la fréquence du faible revenu dans quatre générations : les enfants (de 0 à 14 ans), les jeunes adultes (de 25 à 34 ans), la population d'âge actif moyen (de 45 à 54 ans) et les personnes âgées (de plus de 65 ans).

Dans le cas des personnes âgées, les tendances récentes du faible revenu sont attribuables en grande partie à des faits survenus avant 1973 (année à laquelle nos données commencent). Ces faits ont eu une incidence sur le taux de faible revenu des personnes âgées au cours des années 70, 80 et 90. La période comprise entre la fin de la Seconde Guerre mondiale et 1973 a été marquée par un essor économique spectaculaire dans toutes les sociétés occidentales. Pour la population d'âge actif, il en est résulté une hausse constante des salaires et une nette amélioration du niveau de vie par rapport à celui des générations antérieures. Vers le milieu des années 60, toutefois, il s'est avéré qu'une grande partie des personnes âgées

n'avaient pas bénéficié de cette prospérité d'après-guerre. L'augmentation du nombre de retraités, allée à la relative modicité des régimes de sécurité de la vieillesse dans la plupart des pays, a accru la fréquence du faible revenu chez les personnes âgées. Par conséquent, les années 60 ont été marquées par la prise d'une foule de mesures sociales visant à améliorer la sécurité économique de ces personnes (Myles, 1989). Au Canada, le Régime de pensions du Québec (RPC) et le Régime de rentes du Québec (RRQ) ont été adoptés en 1965 et le Supplément de revenu garanti (SRG), l'année suivante. Toutefois, il a fallu attendre près de deux décennies avant de constater les résultats de cette ratée de mesures législatives. La première cohorte à toucher des prestations intégrales en vertu du RPC ou du RRQ a eu 65 ans en 1976. De même, jusqu'aux années 80, peu de travailleurs, au moment de la retraite, avaient accumulé bien des droits à pension en vertu d'un régime de retraite privé. Jusqu'à la Seconde Guerre mondiale, les régimes de retraite d'employeur étaient rares. La portée des régimes a pris une expansion rapide jusqu'aux années 60 et progressé légèrement au cours des années 70, avant de reculer quelque peu pendant les années 80. Les premières cohortes de retraités à bénéficier d'un régime privé important sont entrées sur le marché du travail après la Seconde Guerre mondiale et ont commencé à toucher des prestations à la fin des années 80.

Nous constatons qu'en 1973, environ 25 % des personnes âgées touchaient encore un revenu inférieur à la moitié du revenu médian de la population. Au milieu des années 80, la proportion était tombée à environ 10 % puis, en 1995, à moins de 4 %. S'ils étaient loin d'être riches—en 1995, le revenu médian des personnes âgées correspondait à 87 % du revenu médian de l'ensemble des particuliers—les



DOCHERTY, Jane (1997). « Blessed are the poor, for they can be labelled. » *Globe and Mail*, 6 juin.

HELLIWEILL, John F. (1998). « Quel sera notre legs ? » Dans Miles Corak (dir.). *Les finances publiques et l'équité intergénérationnelle*. Ottawa : Statistique Canada, n° 68-513-XPB au catalogue.

OSBERG, Lars (1998). « Équité entre les générations—Signification et mesure. » Dans Miles Corak (dir.). *Les finances publiques et l'équité intergénérationnelle*. Ottawa : Statistique Canada, n° 68-513-XPB au catalogue.

OSBERG, Lars, Fred WEIN, et Jan GRUDE (1995). *Vanishing Jobs: Canada's Changing Workplaces*. Toronto: James Lorimer and Company.

WOOD A. (1994). *North-South Trade, Employment, and Inequality*. Oxford: Oxford University Press.

## Bibliographie

<sup>2</sup> Docherly donne un exemple frappant de cet élément (1997) et souligne que le fait « d'élitiser » les enfants comme faisant partie d'un groupe à risque élevé peut inciter leur entourage à changer son comportement et à les traiter différemment, contribuant ainsi aux résultats négatifs. Ce point de vue est repris dans les travaux d'Osberg (1998) et d'Heilwell (1998).

BLANK, Rebecca M. et Maria J. HANRATTY (1993). « Responding to Need: A Comparison of Social Safety Nets in Canada and the United States. » Dans David Card et Richard B. Freeman (dir.). *Small Differences that Matter: Labor markets and Income Maintenance in Canada and the United States*. Chicago: University of Chicago Press.



important de surestimer les effets négatifs possibles. Il faut des analyses plus convaincantes de données plus précises.

[4] Les familles et les collectivités jouent un rôle

important quant à la situation des enfants, mais de quelle façon? Comment exactement les familles donnent-elles à leurs enfants l'énergie nécessaire pour faire face aux difficultés de la vie, en dépit du revenu dont elles disposent? Quel est le rôle de la collectivité et du « capital social » à l'intérieur du processus? Ces questions semblent essentielles, étant donné que de nombreux enfants provenant de familles à faible revenu ou de familles monoparentales deviennent des adultes qui réussissent. Les tendances qui ressortent de la recherche correspondent souvent à des effets « moyens », et révèlent peu de choses au sujet de la gamme variée d'expériences ou de causes de ces écarts<sup>2</sup>. Pour comprendre ces écarts, il faut examiner de façon plus détaillée les rouages internes de la famille, la façon dont les ressources sont partagées et dont les décisions sont prises, ainsi que le système de soutien qui existe dans la collectivité. Les modèles de comportement, les groupes de pairs et les caractéristiques du voisinage font partie de ce grand rôle joué par la collectivité, mais la recherche aux fins des politiques doit aller plus loin et examiner comment les familles ont accès aux ressources mises à leur disposition par l'État. Par exemple, la disponibilité d'un système universel d'éducation et de soins de santé ne signifie pas que celui-ci sera utilisée le plus efficacement possible par certaines familles.

#### 4. Conclusion

L'avenir des enfants au Canada comporte à la fois des aspects positifs et négatifs. De nombreux enfants sont bien préparés par leur famille, leurs amis et les institutions publiques, et obtiennent de bons résultats, en dépit des changements importants qui ont touché le marché du travail. D'autres n'ont pas cette chance. Les écarts entre ces groupes sont en soi une source de pré-occupations, mais aussi du fait qu'ils sont susceptibles d'avoir des répercussions sur la génération suivante. Il est probable que les enfants des jeunes adultes d'aujourd'hui entreront dans un cercle vertueux ou vicieux, étant donné

que les avantages et les obstacles sont transmis. Est-ce équitable? En savons-nous suffisamment au sujet de la dynamique inter-générationnelle pour intervenir?

Ces questions sont fondamentales mais très difficiles à résoudre, et le dernier mot à cet égard revient à Susan McDaniel et Bob Baldwin, au chapitre 11. Ils examinent, chacun à leur façon, les répercussions des recherches du présent ouvrage en matière d'équité intergénérationnelle et de politique gouvernementale. De façon plus particulière, McDaniel prétend que le fait de résumer les progrès réalisés au cours des deux dernières décennies en un conflit intergénérationnel entre le groupe actuel des personnes âgées et les cohortes actuelles de jeunes (et potentiellement leurs jeunes enfants ou leurs enfants non encore nés) serait inapproprié et irait en fait à l'encontre du but recherché. Elle présente une gamme de questions (à la fois théoriques et empiriques) qui doivent être précisées, examinées dans quelle mesure un nouveau contrat social entre les générations voit le jour au Canada, et souligne trois cadres politiques de

échange pour l'avenir. Quant à lui, Baldwin offre une liste impressionnante de ce que les jeunes générations devraient raisonnablement s'attendre d'obtenir en héritage des générations plus âgées. Son analyse commence par un lien entre la recherche comprise dans le présent ouvrage et cette liste, puis souligne les lacunes importantes en matière d'information qui subsistent. Il spéculé en outre sur la nature du contrat social entre les générations qui lie les Canadiens, et compare l'attitude de la société à l'égard des prestations de retraite versées aux personnes âgées et le soutien fourni aux jeunes. Il conclut en soulignant l'importance du secteur public à l'égard de tous ces liens.

#### Notes

Cela ressort clairement dans les travaux mentionnés au chapitre 2, ainsi que dans ceux de Blank et Hanratty (1993), qui ont entrepris une analyse comparative des programmes de transferts sociaux canadiens et américains, et de la façon dont ils ont fonctionné dans les deux pays au cours des années 80. Ils sont d'avis que le principal groupe qui profiterait de l'adoption du système antipaupvreté canadien [aux États-Unis] serait les familles avec enfants (p. 219).

soient élèves dans des familles monoparentales ayant à leur tête une femme.

Cette hypothèse, même si elle repose sur l'information des chapitres suivants, part d'un certain nombre de principes qui justifient de poursuivre la recherche davantage.

[1] Quelles sont les origines des changements

profonds qui ont touché le marché du travail, et pourquoi imposent-ils un fardeau si grand aux jeunes? Les éléments qui entraînent le plus de turbulences sur le marché du travail ne sont pas encore bien compris, mais peuvent avoir un lien avec les retards d'adaptation, par suite de la diminution de la croissance de la productivité qui a commencé au début des années 70. Nombreux sont ceux qui prétendent que ces perturbations ont été aggravées par l'avènement de la technologie de l'information (particulièrement les ordinateurs personnels) et la mondialisation des marchés de capitaux et de produits. (Voir, par exemple, Osberg, Wein et Grude, 1995, ainsi que Wood, 1994). Il existe encore certainement de nombreuses controverses au sujet des répercussions qu'ont eu la technologie informatique et la mondialisation sur la polarisation des revenus ici (et dans les autres pays de l'OCDE). Quelles que soient les causes, toutefois, il est clair que les institutions du marché du travail canadien ont structuré les adaptations à ces perturbations de façon à imposer un fardeau important aux jeunes, particulièrement les jeunes hommes sans compétences particulières. Quels sont les aspects du marché du travail qui ont été à la source de ces perturbations? Sont-ils immuables? Même si ces questions dépassent la portée des travaux qui suivent, elles sont néanmoins au centre de l'élaboration des

[2] La monoparentalité et les mauvais résultats obtenus par les enfants ont-ils une relation de cause à effet? Cela semble certainement être le cas pour les enfants de familles monoparentales qui ont en moyenne davantage de problèmes de comportement et de problèmes sociaux, ainsi qu'un niveau de scolarité moins élevé et un revenu plus faible. Parallèlement, toutefois, il se peut qu'il ne soit pas approprié de prétendre que la situation familiale est à la source de ces tendances. Une telle comparaison ne répond

[3]

pas nécessairement à la question concernant la façon dont les enfants de familles monoparentales se seraient comportés si leurs parents étaient demeurés ensemble. En fait, il se pourrait bien que certains de ces enfants soient dans une meilleure position par suite de cette rupture. Un exemple extrême d'une telle situation pourrait être celui d'une famille dans laquelle les enfants sont témoins d'abus physiques ou mentaux ou en sont les victimes. Si les abus de cette sorte, ou le stress qu'ils entraînent, sont la cause sous-jacente du comportement de l'enfant, c'est donc dire que la rupture de la relation matrimoniale est simplement le signe ou le symptôme d'un problème plus profond. Les relations de cause à effet de la monoparentalité nécessitent une recherche plus poussée.

Il existe une question connexe, à savoir dans quelle mesure l'argent, et particulièrement les transferts de l'État, améliore les résultats obtenus par les enfants. Est-ce que l'argent fait une différence? Cet élément comporte un lien particulièrement étroit avec l'élaboration des politiques, étant donné que l'un des principaux outils dont disposent les gouvernements est le transfert de sommes plus importantes aux familles ayant des enfants. Par exemple, l'hypothèse selon laquelle les sources marchandes de revenu des parents comportent un lien positif avec le revenu futur des enfants, tandis que les sources non marchandes comportent un lien négatif, peut signifier qu'il existe des limites aux répercussions positives des transferts gouvernementaux. Cela laisse toutefois de nombreuses questions sans réponse. S'agit-il d'une relation réelle de cause à effet? Le cas échéant, des transferts plus élevés pourraient même entraîner une réduction du niveau de scolarité chez les enfants et une diminution de leurs chances sur le marché du travail, tout en laissant supposer qu'il existe un modèle de transmission intergénérationnelle de la dépendance à l'égard des transferts gouvernementaux. Toutefois, on doit partir du principe que tous les facteurs qui déterminent ces résultats sont contrôlés, particulièrement ceux qui comportent une corrélation avec le fait de recevoir des transferts, une tâche qui se révèle difficile compte tenu des nombreux ensembles de données disponibles. Ainsi, il existe un risque



presque deux fois plus susceptibles d'être des mères seules (tableau 6.2).

Le processus qui mène à ces résultats est complexe. De façon plus particulière, il est probable que l'instabilité familiale ait des répercussions sur le niveau de scolarité des filles, lequel, à son tour, a une influence directe sur les probabilités qu'elles élèvent leurs enfants seules. Enfin, lorsqu'un mariage survient, il est plus susceptible de prendre fin lorsqu'il y a des antécédents de séparation ou de divorce. Cela est particulièrement vrai pour les hommes, lesquels sont près de trois fois plus susceptibles de voir leur mariage échouer s'ils ont connu l'échec du mariage de leurs parents (tableau 6.3).

### 3. Synthèse et orientations pour la recherche à venir

Une des synthèses qui pourrait convenir à ces huit résultats devrait avoir pour prémisses que trois institutions fondamentales ont un effet déterminant sur le bien-être des enfants et leur préparation à la vie adulte : le marché, l'État et la famille. La portée et le rôle de ces institutions se sont modifiés considérablement au cours des deux dernières décennies, et certains de ces changements semblent avoir été suscités par des transformations importantes sur le marché du travail. De façon plus particulière, le marché du travail a évolué au cours des années 80, ce qui fait que le revenu permanent des jeunes, et particulièrement des jeunes hommes, a diminué en moyenne de 10 %.

Contrairement à ce qui s'est passé aux États-Unis, les transferts gouvernementaux ont mis les enfants canadiens à l'abri des aspects des changements négatifs qui ont touché le marché du travail, au point que l'incidence du faible revenu chez les enfants au Canada n'a pas augmenté<sup>1</sup>. D'autres institutions gouvernementales jouent aussi un rôle important. Le système d'éducation supérieure largement accessible et de grande qualité a permis à de nombreux jeunes d'augmenter leurs acquis. En fait, le marché du travail s'est caractérisé par une égalité raisonnée des chances, en dépit de nombreux autres changements. Même si les jeunes adultes appartenant aux familles ayant les revenus les plus élevés étaient les plus susceptibles d'obtenir les meilleurs résultats, ceux des familles ayant les revenus les plus bas étaient encore plus susceptibles de gravir l'échelle du revenu que de demeurer au bas. Dans l'ensemble, la corrélation entre le revenu et les antécédents

familiaux est relativement faible, ce qui correspond à un marché du travail dans lequel les personnes sont rémunérées selon leurs capacités et leur motivation. Toutefois, étant donné que les changements sous-jacents du marché du travail se sont étalés sur une longue période, les déficits budgétaires gouvernementaux ont atteint des niveaux impossibles à soutenir.

La famille joue aussi un rôle important lorsque vient le temps d'appuyer les jeunes adultes. L'exemple le plus évident de l'augmentation du transfert intergénérationnel entre les parents et les enfants est la tendance des jeunes adultes à demeurer plus longtemps chez leurs parents. La formation de la famille chez les jeunes a aussi changé de façon considérable. La décision de vivre plus longtemps chez ses parents et de fréquenter plus longtemps l'école va de pair avec celle de reporter la formation d'un couple et avec la diminution de la fécondité. Tous ces éléments correspondent toutefois au meilleur scénario, les jeunes les plus susceptibles de suivre ce cheminement ayant tendance à provenir de familles intactes et de familles dont les parents ont un niveau élevé de scolarité.

Par contre, les personnes qui ont connu la séparation et le divorce de leurs parents sont plus susceptibles de cohabiter et d'avoir des enfants à l'extérieur des liens du mariage ou, lorsqu'ils se marient, risquent davantage de voir leur union échouer. En outre, ils sont plus susceptibles d'avoir des problèmes de comportement et des problèmes scolaires, particulièrement les garçons. Les jeunes adultes sont plus susceptibles d'avoir un faible revenu dans les cas où : ils ont connu des déménagements fréquents (et par ricochet, des changements d'école); leurs parents avaient des niveaux moins élevés de scolarité ou n'ont pas utilisé les meilleures stratégies ou n'ont pas utilisé les meilleures stratégies de dépendance parentales; leurs parents dépendaient de sources non marchandes de revenu. Evidemment, tous ces facteurs de risque sont plus élevés pour les enfants qui proviennent de familles dont les parents sont divorcés ou séparés. L'entree dans un marché du travail hostile, avec ce genre de capital social, entraîne une plus grande probabilité de faible revenu, et diminue la tendance de réagir en acquiesçant davantage d'années de scolarité ou en repoussant le moment d'avoir des enfants. Du fait des revenus plus faibles chez les hommes et de la plus grande nécessité d'être actives sur le marché du travail pour les femmes, le stress imposé à des relations déjà fragiles peut avoir augmenté la probabilité que les enfants de la génération suivante



passé au-dessus de ce seuil, n'ont pas de répercussions discernables (tableau 7.3). La même conclusion s'applique aux problèmes scolaires (année doublée, mauvais rendement ou problèmes sociaux fréquents). La probabilité que surviennent un ou plusieurs de ces problèmes est de 20 % pour un enfant représentatif provenant d'une famille biparentale, mais de 34 % pour un enfant ayant des caractéristiques similaires, mais vivant dans une famille monoparentale ayant à sa tête une femme.

Les auteurs du chapitre 7 indiquent que le risque de problèmes psychiatriques chez les enfants semble avoir eu tendance à augmenter entre 1983 et 1993, mais leur plus importante conclusion globale est que « la monoparentalité constitue la variable la plus uniformément et la plus significativement associée aux issues psychiatriques, scolaires et sociaux examinées » (chapitre 7, page 124).

**L'instabilité familiale a des répercussions d'une génération à l'autre. Les jeunes adultes dont les parents se sont séparés ou divorcés connaissent eux aussi des taux élevés d'instabilité familiale, et sont plus susceptibles de se retrouver à la tête d'une famille monoparentale.**

La séparation et le divorce des parents peuvent avoir des répercussions à long terme sur les modèles de formation de la famille de la génération suivante. Le Bourdais et Marcil-Gratton résument les conclusions principales du chapitre 6 en indiquant que la séparation (ou le divorce) des parents tend à être reliée positivement à la vraisemblance que les enfants vivent en union libre, alors qu'elle réduit la probabilité d'un mariage direct. Selon les auteurs, « ces expériences des parents tendent également à être reliées au fait pour les jeunes femmes d'avoir un enfant tôt, hors union ou hors mariage, ainsi qu'à une augmentation des risques de dissolution de l'union, du moins pour les hommes mariés » (chapitre 6, page 99). Par exemple, lorsque l'on contrôle un ensemble d'autres caractéristiques, la probabilité de cohabitation avant l'âge de 25 ans est supérieure de plus de 70 % chez les jeunes adultes dont les parents étaient séparés ou divorcés, tandis que la probabilité de mariage est beaucoup moins grande (particulièrement chez les femmes, où le taux est de 40 % inférieur). En outre, les femmes qui ont vécu la séparation ou le divorce de leurs parents sont presque deux fois plus susceptibles de donner naissance à un enfant avant leur 20<sup>e</sup> anniversaire que celles qui proviennent de familles intactes. Elles sont aussi

s'applique à toutes les études, y compris celles des chapitres 4 et 5.

**La monoparentalité semble comporter une corrélation très étroite avec la façon dont les enfants prennent leur départ dans la vie, et cela vient peut-être du fait qu'elle ne peut être compensée par un revenu plus élevé du ménage.**

Environ 43 % des enfants qui appartiennent à des familles monoparentales ayant à leur tête une femme à faible revenu sont aux prises, à tout le moins, avec certains troubles psychiatriques, ou problèmes scolaires, ou encore problèmes sociaux, comparativement à seulement 24 % des enfants qui sont dans la même situation du point de vue du revenu, mais qui vivent avec leurs deux parents. Un revenu plus élevé ne semble compenser que partiellement l'absence du père, l'incidence d'au moins un de ces problèmes étant de 32 % chez les enfants de familles monoparentales ayant à leur tête une femme, qui se situent au-dessus du seuil de faible revenu. En outre, le taux pour les enfants de familles biparentales à faible revenu est environ le même (24 % par rapport à 20 %) que pour leurs homologues qui se situent au-dessus du seuil de faible revenu (tableau 7.1).

À cet égard il est important de souligner que deux tiers des enfants vivant dans des familles monoparentales ayant à leur tête une femme se situent en-dessous du seuil de faible revenu, tandis que seulement 15 % de ceux qui vivent dans des familles biparentales sont dans la même situation. Les mères seules ont tendance à avoir des niveaux de scolarité plus faibles et à être plus jeunes. En dépit de ces différences, il semble que les enfants de familles monoparentales ayant à leur tête une femme connaissent des risques plus élevés de troubles psychiatriques, qu'il s'agisse d'hypermotivité, de troubles des conduites ou de troubles affectifs—peu importe le revenu de la famille et les autres variables. Le niveau de scolarité de la mère, par exemple, ne semble pas faire une différence majeure, mais la jeunesse de la mère fait augmenter l'incidence de ces problèmes, qui semblent aussi être plus importants pour les garçons que pour les filles. La probabilité moyenne d'être aux prises avec un de ces problèmes est d'environ 15 %, mais passe à 25 % pour les enfants provenant de familles monoparentales ayant à leur tête une femme (tous les autres éléments étant constants). Les changements touchant le revenu familial, c'est-à-dire lorsque celui-ci se situe en-dessous du seuil de faible revenu et qu'il

On a assisté à une mobilité ascendante importante du point de vue de la scolarité, plus de 50 % des Canadiens ayant un niveau de scolarité plus élevé que celui de leurs parents, et seulement 17 %, un niveau moindre (tableau 8.2). Toutefois, la probabilité d'atteindre un niveau de scolarité postsecondaire varie de façon significative selon le niveau de scolarité des parents. Les enfants dont les parents ont un diplôme postsecondaire ont environ 56 % de probabilités d'en avoir un eux-mêmes; ceux dont les parents n'ont qu'un niveau d'études secondaires ont environ 40 % de probabilités; et ceux dont

**Un système d'éducation largement accessible et de grande qualité joue certainement un rôle pour déterminer le niveau élevé de mobilité intergénérationnelle quant au revenu des jeunes. Toutefois, le niveau de scolarité et les antécédents professionnels des parents jouent un rôle aussi important quant à la façon dont les enfants utilisent les ressources que la société met à leur disposition.**

parental ait des discussions différentes pour les enfants, selon la façon dont il a été obtenu, peut constituer une indication que d'autres caractéristiques non observées de la famille sont importantes. En outre, Corak et Heisz ont déterminé que le voisinage, les groupes de pairs ou, de façon générale, les réseaux mis à la disposition des parents, constituent des indicateurs importants des résultats obtenus par les enfants. Il existe une mesure souvent utilisée de ce « capital social » dont héritent les enfants, à savoir le nombre de déménagements résidentiels au début de l'adolescence, qui comporte un lien étroit avec les revenus à l'âge adulte. Les enfants qui ont déménagé deux fois ou plus au cours d'une période de cinq ans, et qui ont par conséquent moins de chance de mettre en valeur leur « capital social », obtiennent beaucoup moins de succès sur le marché du travail que ceux appartenant à des familles qui ont un revenu global équivalent, mais qui n'ont pas déménagé par Mayer (1997), les auteurs laissent entendre que si des facteurs autres qu'un revenu modeste sont les véritables déterminants des perspectives offertes à l'enfant, « il faut donc élaborer des politiques dont l'effet ne se limite pas simplement à transférer de l'argent aux parents » (chapitre 5, page 71).

les parents n'ont pas obtenu de diplôme secondaire ont seulement 22 % de probabilités d'obtenir un diplôme postsecondaire.

Ces modèles sont les mêmes pour la génération qui termine sa scolarité que pour celle qui l'a terminée avant l'avènement d'établissements postsecondaires largement accessibles. La seule exception concerne les jeunes ayant des parents très scolarisés, qui sont encore plus susceptibles d'obtenir un diplôme postsecondaire que leurs homologues plus âgés (près de 70 % le font, comparativement à environ 60 % du groupe plus âgé) (voir la figure 8.1). Cette tendance est encore plus marquée pour ceux dont les parents avaient un diplôme universitaire. En fait, elle s'intensifie et laisse supposer que l'accès aux diplômes postsecondaires devient de plus en plus polarisé.

En outre, les auteurs du chapitre 9 ont déterminé que le niveau de scolarité de la mère joue un rôle important sur le départ des enfants dans la vie. Près de 80 % des mères les moins scolarisées avaient des périodes de gestation plus courte; plus de 60 % ont donné naissance à des bébés de faible poids, comparativement à moins de 40 % des mères ayant une scolarité plus élevée (tableau 9.1). En outre, les bébés nés de mères ayant une scolarité plus faible sont beaucoup plus susceptibles de recevoir des traitements au cours de leur première année de vie, et moins susceptibles de bénéficier de soins préventifs. Ce dernier élément est souvent considéré comme jouant un rôle clé quant à l'état de santé à long terme, ce qui fait que les enfants de ces parents risquent davantage d'avoir une mauvaise santé. En fait, leur taux d'admission à l'hôpital est près du double de celui des groupes plus scolarisés, tandis que leur recours aux soins ambulatoires préventifs ne représente que 60 % de celui des autres groupes. Comme c'est le cas pour les études postsecondaires, les enfants dont les parents ont un niveau de scolarité plus élevé ont accès en proportion plus grande que les autres aux services de soins de santé les plus profitables à long terme. Le niveau de scolarité de la mère semble être un déterminant important de l'accès aux soins de santé; le niveau de revenu du ménage ne semblant pas jouer un rôle aussi important (tableau 9.3).

Toutefois, la recherche du chapitre 9 commente une limite importante, à savoir que la monoparentalité ne fait pas l'objet d'un contrôle simultané. Le niveau de scolarité de la mère peut constituer une approximation de la monoparentalité. En fait, cette limite générale



ché du travail d'un partenaire de vie qui ne travaillait pas auparavant. Toutefois, pour ceux qui avaient du mal à joindre les deux bouts ou pour qui cela représentait un stress trop grand, les rapports ont pris fin ou n'ont pas duré, avec pour résultat que l'incidence de la monoparentalité et du faible revenu a augmenté. Comme l'indiquent Picot, Myles et Pyper : « La réduction future de la fréquence du faible revenu chez les enfants dépendra plutôt—et surtout—de la capacité accrue de leurs parents à gagner leur vie ou de l'amélioration des transferts sociaux » (chapitre 2, page 23).

## Les résultats sur le marché du travail des jeunes ne comportent qu'un faible lien avec le revenu des familles dont ils proviennent. Beaucoup d'autres facteurs, outre l'argent, ont une influence déterminante sur le cheminement des enfants dans la vie.

En fait, le marché du travail au Canada semble se caractériser par une plus grande mobilité intergénérationnelle que celui des États-Unis ou du Royaume-Uni. Fortin et Lefebvre font ressortir que la corrélation entre le revenu des pères et des fils est inférieure à 0,2; entre les pères et les filles, elle est légèrement plus élevée, mais dans tous les cas, les corrélations sont considérablement plus faibles que celles de 0,4 enregistrées de façon générale aux États-Unis et au Royaume-Uni. En ce sens, le Canada s'apparente davantage à l'Europe continentale qu'aux économies anglo-américaines. Le lien avec le revenu parental est encore plus faible pour la cohorte née après 1955, cette période correspondant à l'expansion de l'État providence et à la mise en place d'un système d'études postsecondaires universellement accessible (tableau 4.4). De façon plus particulière, les enfants nés de pères se situant au niveau inférieur de l'échelle de répartition du revenu sont légèrement plus susceptibles d'atteindre le niveau moyen que de se maintenir au niveau inférieur. Les enfants nés de pères se trouvant au sommet de l'échelle de répartition de revenu, toutefois, sont plus susceptibles de se maintenir au sommet.

En fait, ce n'est pas uniquement le montant, mais aussi la composition du revenu du père, qui ont une influence sur les résultats obtenus par les enfants. Les sources marchandes de revenu—rémunération, revenu d'un emploi autonome et revenu de placements—comportent un lien positif avec le revenu possible des enfants. Les sources non marchandes, par exemple, l'assurance-emploi et d'autres transferts, ne sont

enfants, tout en augmentant leur pouvoir d'achat grâce à une hausse de leur niveau de scolarité. En outre, les femmes sont entrées sur le marché du travail en nombres encore plus importants, et le nombre de couples à deux revenus a augmenté. Pour joindre les deux bouts, les jeunes ont aussi eu davantage tendance à demeurer chez leurs parents ou à retourner y vivre. Par exemple, en 1981, environ 26 % des jeunes âgés de 23 à 24 ans vivaient avec leurs parents, tandis qu'en 1990, cette proportion atteignait 40 %. En outre, ceux qui quittaient le foyer familial étaient moins susceptibles de vivre en couple. Pour citer un exemple du chapitre 10, environ 55 % des jeunes âgés de 21 à 22 ans qui ne vivaient pas avec leurs parents, vivaient en couple en 1981, mais seulement 39 % faisaient de même en 1990 (tableau 10.2). Cela a notamment à voir avec le nombre croissant de jeunes qui consacrent la majorité de leur temps aux études, dans une proportion supérieure à 13 % au cours des années 80. En résumé, le mode de vie des jeunes adultes a changé considérablement.

Ces changements ont aidé à contenir le taux de faible revenu chez les enfants. Toutefois, comparativement aux années 70 et 80, les changements aux chapitres de la démographie et du marché du travail au cours des années 90 ont fait en sorte d'augmenter les risques de faible revenu. Par exemple, la proportion d'enfants dans les familles comptant trois enfants ou plus a diminué, passant de 48 % en 1973 à environ 30 % en 1988, mais est demeurée à peu près constante depuis. La proportion d'enfants dans les ménages dont au moins un parent est titulaire d'un diplôme universitaire a plus que doublé, passant de 8,3 % en 1973, à environ 18 % en 1988, mais est demeurée constante depuis. Enfin, la proportion d'enfants appartenant à des familles biparentales à deux soutiens est passée de 47 % en 1973 à plus de 66 % en 1988, mais a diminué, pour se fixer à 63 % en 1995 (tableau 2.1). En fait, un nombre croissant d'enfants vivent dans des ménages qui ont de la difficulté à joindre les deux bouts. Tandis que seulement 4,6 % des enfants âgés de moins de 14 ans vivaient dans des ménages monoparentaux en 1973, cette proportion a augmenté de façon constante, pour atteindre presque 13 % au milieu des années 90. Les personnes qui pouvaient s'adapter à la turbulence des marchés du travail l'ont fait—soit en repoussant la date de leur mariage, en demeurant plus longtemps chez leurs parents, en augmentant leur niveau de scolarité, ou encore grâce à l'entrée sur le mar-



## 2. Principales conclusions

La situation du marché du travail s'est détériorée pour les jeunes, particulièrement les hommes, avec pour résultat qu'une proportion beaucoup plus importante d'entre eux fait maintenant partie de ce que l'on appelle la main-d'œuvre « auxiliaire ». Leurs perspectives de salaires semblent s'être détériorées constamment au cours des années 80.

Moins de jeunes hommes sont actifs sur le marché du travail; un nombre moins grand d'entre eux a un emploi; et une plus grande proportion est au chômage. En fait, plus du tiers des hommes âgés de 17 à 24 ans peuvent être classés comme appartenant à la main-d'œuvre auxiliaire, c'est-à-dire qu'ils sont chômeurs, employés à temps partiel involontairement, ou titulaires d'un emploi non permanent. Même les emplois occupés par des travailleurs à temps plein ont changé. Ils sont maintenant plus nombreux dans les secteurs moins bien rémunérés, comme les services aux consommateurs, que dans celui de l'industrie manufacturière et dans la fonction publique. En 1981, jusqu'à 30 % des jeunes hommes travaillaient à temps plein dans l'industrie manufacturière; en 1995, cette proportion se situait à 23 %. Les chiffres sont presque inverses dans les services aux consommateurs : 23 % des travailleurs se trouvaient dans ce secteur en 1981, comparativement à 33 % en 1995. En outre, la proportion de travailleurs à temps plein dans des postes syndiqués a diminué de moitié (passant de 33 % à 15 % entre 1981 et 1995).

Cela a pour résultat que les jeunes hommes (qui travaillaient à temps plein et à longueur d'année) ont gagné en 1994 le même montant que leurs homologues en 1969 (en termes réels). Par contre, les 45 à 54 ans gagnent plus de 30 % de plus que leurs homologues il y a 25 ans. Les perspectives de salaires des jeunes hommes ont augmenté entre le début et le milieu des années 70, ont commencé à se détériorer par la suite, puis ont chuté considérablement au cours de la récession de 1981-1982, et n'ont pas connu de reprise depuis (voir la figure 3.1 du chapitre 3). Les jeunes hommes qui sont entrés sur le marché du travail entre 1984 et 1993 gagnaient presque 11 % de moins au cours de cette période que les jeunes hommes de la décennie précédente. Par contre, les 35 à 44 ans gagnaient environ 4 % de plus (tableau 3.7). Ces changements traduisent une diminution généralisée des perspectives de salaires des jeunes, sans égard

à la branche d'activité, à la profession, à l'adhésion syndicale, ni même au contexte macroéconomique (c'est-à-dire des taux de chômage globalement plus élevés). Même si le taux de chômage avait été le même, les jeunes des années 80 auraient commencé leur carrière avec une rémunération inférieure de presque 20 % à celle de leurs homologues dix ans plus tôt. Essentiellement, on a assisté à une détérioration permanente des perspectives de rémunération des jeunes hommes.

**Cela fait ressortir le risque qu'eux et leurs enfants se retrouvent dans une situation de faible revenu.**

Le taux de faible revenu, qui est fondé uniquement sur le revenu marchand, chez les familles ayant des enfants âgés de 14 ans et moins était de 20 % jusqu'au début des années 80 environ, mais a augmenté à plus de 25 % au milieu des années 90. Parallèlement, les personnes âgées de plus de 45 ans n'ont connu aucun changement quant à leur probabilité de toucher un faible revenu marchand (figure 2.1).

**Les transferts gouvernementaux ont joué un rôle de premier plan quant à la réduction du risque que le faible revenu marchand se transforme en faible revenu familial.**

Même si le revenu sur le marché du travail des familles ayant de jeunes enfants a diminué au cours des années 80 et au début des années 90, le revenu familial total—étant donné une augmentation substantielle de la part de transferts gouvernementaux—n'a pas suivi la même tendance. Le marché du travail était à la source d'environ 65 % du revenu familial total au début des années 70, mais d'environ 30 % au milieu des années 90. Parallèlement, les transferts représentaient moins de 40 % du revenu familial total en 1973, mais plus de 60 % au milieu des années 90. Par conséquent, les taux de faible revenu après impôts et transferts sont demeurés essentiellement constants à environ 15 % (voir les figures 2.1 et 2.2).

**Il existe un autre facteur important qui protège les enfants d'une situation de faible revenu, à savoir les changements quant au comportement en matière de situation de famille et de fécondité des jeunes adultes, mais à la fin des années 80 ou au début des années 90, cette protection a atteint ses limites.**

Tout au long des années 70 et 80, les jeunes ont reporté le moment de se marier et d'avoir des

rôle relatif joué par la monoparentalité et le revenu familial quant à l'apparition de ces problèmes, ainsi que la mesure dans laquelle un revenu plus élevé compense pour l'absence d'un parent. Leurs données permettent en outre une évaluation limitée des changements quant à l'incidence des divers problèmes de comportement, à partir du début des années 80 jusqu'au début des années 90.

Les antécédents et les stratégies d'éducation des parents sont examinés de façon plus approfondie au chapitre 8, par de Broucker et Lavallée, qui étudient les résultats scolaires des jeunes en fonction des antécédents familiaux de ces derniers. Etant donné que le niveau de scolarité est un déterminant important du statut économique et social, les auteurs examinent l'influence relative des parents et du système d'éducation quant au niveau de scolarité d'une cohorte plus jeune et plus âgée d'hommes et de femmes. Ils réussissent notamment à établir un lien entre le niveau de scolarité de ces groupes et le niveau de scolarité de leurs parents, mais aussi en rapport avec quantité de stratégies parentales ayant trait au soutien scolaire.

Au chapitre 9, Knighton, Houle, Berthelot et Mustard étudient la santé de l'enfant au cours de sa première année de vie, et mettent l'accent sur le rôle relatif que jouent le revenu familial et le niveau de scolarité de la mère quant à la façon dont les nouveaux-nés sont traités par le système médical, au type de soins qu'ils reçoivent et au répercussions en matière de coûts. Leur analyse est fondée sur un ensemble unique de données qui comporte un lien entre les données socio-économiques du recensement et les antécédents médicaux d'un groupe de nouveaux-nés au Manitoba, au milieu des années 80. Etant donné que les premières années de vie sont souvent cruciales pour le développement de l'enfant, cette étude est importante du fait qu'elle illustre le rapport qui existe entre le statut socio-économique des parents et le type de soins que les nouveaux-nés reçoivent.

A partir des conclusions des recherches des chapitres 2 à 10, le chapitre 11 comprend deux études, une par Susan McDaniel et une autre par Bob Baldwin, qui soulignent les répercussions pour les décideurs ainsi que les lacunes qui subsistent du point de vue de l'information, et qui fournissent certaines orientations pour la recherche future.

la façon dont les familles et les collectivités parent les jeunes à la vie adulte, ainsi que du rôle que joue le revenu dans ce processus. Les auteurs du chapitre 6 traitent du lien qui existe entre la séparation et le divorce des parents et les décisions en matière de situation de famille et de fécondité que prennent les enfants. Ceux du chapitre 7 examinent les liens qui existent entre le revenu et la monoparentalité et les troubles psychiatriques et sociaux chez les enfants. Au chapitre 8, on relie la scolarité des parents et les stratégies parentales qu'ils utilisent et les décisions que prennent les enfants du point de vue des études. Au chapitre 9, les auteurs évaluent dans quelle mesure le niveau de scolarité de la mère et le revenu familial influent sur les soins de santé reçus par les enfants.

Au chapitre 6, Le Bourdais et Marci-Carillon notent que le bien-être économique à long terme des enfants a non seulement trait au revenu dont disposaient leurs parents lorsqu'ils les ont éduqués, mais aussi aux attitudes sociales qu'ils leur ont inculquées. De façon plus particulière, elles soulignent que la génération actuelle de jeunes est la première à être éduquée dans un contexte d'attitudes et de dispositions législatives moins strictes à l'égard du divorce, et elles font une comparaison entre les décisions en matière de situation de famille que prennent les enfants de parents divorcés ou séparés et celles des enfants dont l'environnement familial est stable. Les enfants de parents divorcés sont-ils plus susceptibles de vivre une instabilité au niveau de la situation de famille à l'âge adulte? Ont-ils davantage tendance à éviter le mariage et à lui préférer la cohabitation? Ont-ils davantage d'enfants à un âge plus précoce? Etant donné que le risque de faible revenu chez les enfants comporte un lien étroit avec la monoparentalité, l'étude effectuée par les auteurs contribue à déterminer dans quelle mesure les jeunes Canadiens sont plus susceptibles d'éduquer leurs enfants dans un contexte économique négatif, du fait du « capital social » dont ils ont hérité.

Sur la base de cette hypothèse, le chapitre 7 explore les répercussions possibles de la monoparentalité sur le bien-être des jeunes enfants. Doooley, Curtis, Lipman et Feeny examinent une quantité de comportements importants qui rendent compte du fait que les enfants ont un départ difficile dans la vie. Les difficultés sont regroupées en trois grandes catégories : troubles psychiatriques, mauvais rendement scolaire et problèmes sociaux. Les auteurs évaluent le



# 1. Aperçu

est caractérisée par un ensemble d'autres changements, et font ressortir les différences entre les jeunes hommes et les jeunes femmes.

Dans les chapitres 4 et 5, on lie les résultats des jeunes sur le marché du travail à leurs antécédents familiaux. Cette recherche évalue le degré d'égalité des chances sur le marché du travail pendant cette période de turbulence. Dans quelle mesure et comment les jeunes sont-ils préparés à une vie adulte autonome et réussie? Les inégalités passées et présentes seront-elles transférées à la génération suivante. Ou encore, comme le soulignent Fortin et Lefebvre, en introduction au chapitre 4, les enfants des familles à haut revenu gagneront-ils un revenu aussi élevé et les enfants des familles à faible revenu deviendront-ils des adultes à faible revenu?

L'objectif visé par Fortin et Lefebvre est d'estimer avec précision la corrélation qui existe entre le revenu des adultes et celui des familles dont ils proviennent. Elles mettent l'accent sur les corrélations entre le revenu des pères et des fils et celui des pères et des filles, ainsi que sur la façon dont elles ont évolué avec le temps. Elles démontrent en outre comment ces deux corrélations varient, selon la répartition du revenu, grâce au calcul de la proportion des personnes provenant de familles à faible revenu qui deviennent des adultes à faible revenu, et parallèlement, de la proportion des personnes provenant de familles à revenu élevé qui se maintiennent au sommet de l'échelle de répartition du revenu à la génération suivante.

Corak et Heisz abordent ce thème de façon plus poussée au chapitre 5. Ils se préoccupent de la mesure dans laquelle le fait de provenir d'une famille à faible revenu peut laisser des traces permanentes sur les enfants, mais aussi de la mesure dans laquelle le faible revenu contribue à proprement parler au désavantage, ou encore est le reflet d'autres facteurs sous-jacents. À cette fin, ils examinent trois grands facteurs qui influencent les résultats obtenus par les enfants sur le marché du travail : le montant et la composition du revenu du père, les caractéristiques du voisinage, la structure de la famille.

Ces deux chapitres fournissent un aperçu général des rapports qui existent entre les générations, mais ils n'abordent pas les processus sous-jacents de façon pleinement détaillée. On peut aussi penser qu'ils n'examinent que la situation idéale, c'est-à-dire celle des familles où le père est présent. Le reste de l'analyse, qui est compris dans les chapitres 6 à 9, tente de combler certaines omissions, grâce à un examen de

Les auteurs des chapitres 2, 3 et 10 déterminent le niveau de turbulence des marchés du travail, et la façon dont les Canadiens, particulièrement les jeunes, réagissent aux changements qui se produisent. Au chapitre 2, Picot, Myles et Pypers expliquent les progrès réalisés du point de vue du statut économique par quatre générations, depuis le début des années 70 : les enfants, les jeunes adultes, les travailleurs plus âgés et les personnes âgées. Leur analyse donne une vue globale des progrès réalisés par les diverses générations, et offre un aperçu de la situation relative des enfants. Comment chacun de ces groupes a-t-il été traité sur le marché du travail? Comment chacun d'entre eux a-t-il réagi aux changements qui se sont produits au cours des dernières décennies? Les auteurs répondent à ces questions en examinant les tendances du faible revenu et en illustrant dans quelle mesure les transferts sociaux ont protégé chacun de ces groupes de la turbulence du marché du travail. Ils examinent en outre la façon dont les familles se sont adaptées à ces changements, les effets qu'ont eu ces adaptations sur le risque de faible revenu, et la mesure dans laquelle elles peuvent continuer à réduire ce risque pour l'avenir.

Au chapitre 3, Morissette met l'accent sur la détérioration du statut des jeunes hommes sur le marché du travail et examine les tendances du point de vue de l'emploi, des salaires, des taux de rémunération et des probabilités qui en découlent d'échapper au faible revenu. Il procède notamment à une analyse détaillée selon la cohorte, avec des comparaisons entre les expériences des hommes de divers âges, qui sont entrés sur le marché du travail au milieu des années 80, et celles d'hommes de groupes d'âge similaires, qui sont entrés sur le marché du travail au milieu des années 70. Après avoir suivi ces cohortes respectives pendant une période pouvant aller jusqu'à dix ans, il a pu déterminer dans quelle mesure les perspectives de salaires, toute la vie durant, se sont modifiées de façon permanente. Il examine aussi la longueur des périodes de faible revenu pour ces groupes.

Meunier, Bernard et Boisjoly présentent, au chapitre 10, une étude complémentaire qui porte sur trois aspects connexes du mode de vie des jeunes : logement et cohabitation, études, et modèles de travail. Ils accordent une attention particulière aux changements qui se sont produits au cours des années 80, et déterminent dans quelle mesure le moment de quitter le foyer est retardé, et la transition vers l'indépendance



# Chapitre 1

## Introduction

Le bien-être des enfants comporte un lien avec de nombreux aspects de la politique gouvernementale, et a gagné en importance dans les programmes de tous les gouvernements. En fait, il préoccupe de plus en plus les Canadiens en général, pour au moins deux raisons. La première a trait au fait que les marchés du travail ont changé fondamentalement, au cours des deux dernières décennies, d'une manière qui est généralement perçue comme désavantageuse pour les jeunes. On laisse souvent entendre que nous sommes en présence, pour la première fois depuis des générations, d'un groupe qui ne peut s'attendre à atteindre un niveau de vie plus élevé que celui de ses parents. La deuxième raison a trait aux préoccupations relatives aux enfants de cette génération, étant donné qu'on part souvent du principe que le fait d'appartenir à une famille à faible revenu, lorsqu'on est enfant, prédispose à une vie complète marquée au coin du faible revenu.

La recherche qui est résumée dans les chapitres du présent ouvrage jette de la lumière sur ces deux thèmes : comment les changements qui touchent les marchés du travail affectent le niveau de vie des familles qui ont des enfants, et comment les institutions sociales qui assurent la redistribution du revenu et le bien-être intergénérationnel interviennent pour déterminer, en dernière analyse, la situation à long terme des enfants? On se demande aussi comment se comportent les cohortes plus jeunes, par rapport à d'autres groupes, dans ce qui semble être un marché du travail plus effervescent. Dans quelle mesure, et comment, leur famille et les institutions publiques les appuient-elles? Les enfants provenant de familles mieux nanties obtiennent-ils de meilleurs résultats? Ceux qui proviennent de familles à plus faible revenu en obtiennent-ils de moins bons? De façon plus générale, comment le statut économique et

social est-il transmis des parents aux enfants? Le marché du travail est-il stratifié de façon rigide, les parents qui ont un revenu plus élevé transmettant leur statut économique à leur descendance, et les enfants qui proviennent de familles à plus faible revenu étant prisonniers d'un cycle de faible revenu? Ou existe-t-il plutôt une plus grande souplesse, les capacités et la motivation individuelle étant récompensées, peu importe les antécédents sociaux et économiques? Outre le revenu, quels autres aspects des antécédents de l'enfant jouent un rôle important à l'intérieur de ce processus, et quel rôle jouent les systèmes de transfert du revenu, d'éducation et de soins de santé à cet égard?

Il est étonnamment difficile de trouver des réponses définitives à ces questions, ces dernières étant toutefois au centre de l'élaboration des politiques gouvernementales. L'objectif du présent ouvrage est de contribuer à la recherche, de faire ressortir certaines des lacunes importantes du point de vue de l'information, ainsi que de laisser présager certaines des orientations que pourraient envisager d'explorer les organismes statistiques et les décideurs. Le principal message qui ressort est que l'avenir des enfants au Canada comporte à la fois des aspects positifs et négatifs. Les marchés du travail ont changé considérablement, et, en moyenne, il est plus difficile maintenant d'acquiescer les bases solides nécessaires pour aspirer à une prospérité croissante. De nombreux jeunes Canadiens sont néanmoins bien préparés par leur famille et leur collectivité à relever ces nouveaux défis et, en tant que jeunes parents, ils sont bien placés pour transmettre cet héritage à leurs enfants. Toutefois, cela ne s'applique pas à une minorité de plus en plus grande, un groupe dont les enfants devront à leur tour relever des défis plus grands que la moyenne pour progresser dans la vie.

**LAVALL LAVALLÉE**  
 Vestimetre International Inc.  
 6268 de Vimy  
 Montréal (Québec) H3S 2R3  
 (514) 341-0313  
 info@vestimetre.com

**TAMARA KNIGHTON**  
 Enquêtes auprès des ménages et sur le travail  
 Statistique Canada  
 Ottawa (Ontario) K1A 0T6  
 (613) 951-7326  
 knigtam@statcan.ca

**ARTHUR KROEGER**  
 245 Springfield Road  
 Ottawa (Ontario) K1M 0L1  
 (613) 745-8222

**CÉLINE LE BOURDAIS**  
 Institut national de la recherche scientifique-  
 Urbanisation  
 Montréal (Québec) H2X 2C6  
 (514) 499-4062  
 celine\_lebourdais@inrs-urb.quebec.ca

**SOPHIE LEFEBVRE**  
 Direction des études analytiques  
 Statistique Canada  
 Ottawa (Ontario) K1A 0T6  
 (613) 951-5870  
 lefesop@statcan.ca

**ELLEN L. LIPMAN**  
 Department of Psychiatry  
 McMaster University  
 Hamilton (Ontario) L8N 3Z5  
 (905) 521-2100 ext. 7369  
 lipmane@mcmaster.ca

**SUSAN A. MCDANIEL**  
 Department of Sociology  
 University of Alberta  
 Edmonton (Alberta) T6G 2H4  
 (403) 492-0488  
 susan.mcdaniel@ualberta.ca

**CAM MUSTARD**  
 Institute for Work & Health  
 250 Bloor Street East, Suite 702  
 Toronto (Ontario) M4W 1E6  
 (416) 927-2027  
 cmustard@iwh.on.ca

**RENÉ MORISSETTE**  
 Direction des études analytiques  
 Statistique Canada  
 Ottawa (Ontario) K1A 0T6  
 (613) 951-3608  
 moriren@statcan.ca

**JOHN MYLES**  
 Department of Sociology  
 Florida State University  
 Tallahassee, Florida U.S. 32306  
 (850) 644-5418  
 jmyles@css.fsu.edu

**GARNETT PICOT**  
 Direction des études analytiques  
 Statistique Canada  
 Ottawa (Ontario) K1A 0T6  
 (613) 951-8214  
 picogar@statcan.ca

**WENDY PYPER**  
 Direction des études analytiques  
 Statistique Canada  
 Ottawa (Ontario) K1A 0T6  
 (613) 951-0381  
 pypewen@statcan.ca

**DOMINIQUE MEUNIER**  
 119 Val d'Amour  
 39380 La Loye  
 France  
 dominique@ceps-nt1.ceps.lu

**NICOLE MARCIL-GRATTON**  
 Département de la démographie  
 Université de Montréal  
 Montréal (Québec) H3C 3J7  
 (514) 343-5661  
 marcilg@ere.umontreal.ca

**BOB BALDWIN**  
Congrès du Travail du Canada  
2841 Riverside Drive  
Ottawa (Ontario) K1V 8X7  
(613) 526-7408  
bbaldwin@clc-ctc.ca

**PAUL BERNARD**  
Département de sociologie  
Université de Montréal  
Montréal (Québec) H3C 3J7  
(514) 343-6632  
bernardp@ere.umontreal.ca

**JEAN-MARIE BERTHELOT**  
Direction des études analytiques  
Statistique Canada  
Ottawa (Ontario) K1A 0T6  
(613) 951-3760  
berthel@statcan.ca

**JOHANNE BOISJOLY**  
Département des Sciences Humaines  
Université du Québec à Rimouski  
Rimouski (Québec) G5L 9B4  
(418) 723-1986 ext. 1687  
boisjoly\_johanne@uqar.quebec.ca

**MILES CORAK**  
Direction des études analytiques  
Statistique Canada  
Ottawa (Ontario) K1A 0T6  
(613) 951-9047  
coramill@statcan.ca

**LORI CURTIS**  
Faculty of Medicine  
Dalhousie University  
Halifax (Nova Scotia) B3H 4H7  
(902) 494-7043  
lori.curtis@dal.ca

**PATRICE DE BROUCKER**  
Statistique sociale et des institutions  
Statistique Canada  
Ottawa (Ontario) K1A 0T6  
(613) 951-3999  
debrpat@statcan.ca

**MARTIN D. DOOLEY**  
Department of Economics  
McMaster University  
Hamilton (Ontario) L8S 4M4  
(905) 525-9140 ext. 23810  
dooley@mcmill.cis.mcmaster.ca

**DAVID FEENY**  
Pharmacy and Pharmaceutical Sciences  
University of Alberta  
Edmonton (Alberta) T6G 2N8  
(403) 492-2234  
dfeeny@pharmacy.ualberta.ca

**NICOLE FORTIN**  
Département des sciences économiques  
Université de Montréal  
Montréal (Québec) H3X 3J7  
(514) 343-2400  
fortin@crde.umontreal.ca

**ANDREW HEISZ**  
Direction des études analytiques  
Statistique Canada  
Ottawa (Ontario) K1A 0T6  
(613) 951-3748  
heisand@statcan.ca

**CHRISTIAN HOULE**  
Développement des ressources humaines  
Statistique Canada  
Ottawa (Ontario) K1A 0T6  
(613) 951-3927  
houlchr@statcan.ca



l'opinion publique qui les incite à régler le problème du chômage, et tout en reconnaissant qu'il faut « faire quelque chose », la grande question tourne autour de la définition de ce « quelque chose ». On ne trouvera pas la réponse à cette dernière question demain matin.

Voici qui m'amène à la conclusion. Jamais auparavant les gouvernements n'ont-ils eu plus besoin de s'appuyer sur des évaluations sérieuses et des applications créatives des données afin d'affronter les questions sociales complexes

et exigeantes qui les assaillent. L'équité intergénérationnelle en est une, mais une seule parmi d'autres. Dans un avenir prévisible, étant donné le fardeau imposant de la dette, les gouvernements ne disposeront que de ressources limitées. Pour faire en sorte d'utiliser ces ressources limitées de façon optimale, ils devront pouvoir compter sur les meilleurs avis qu'il est possible d'obtenir. Et à la base de ces avis, on retrouve le genre d'analyse qui est présentée dans le présent volume.

L'évolution dans un sens défavorable de l'économie et du marché du travail est un facteur important qui alimente le débat autour de l'équité intergénérationnelle. Le problème toutefois ne tient pas au fait que les personnes âgées, tout bien considéré, reçoivent trop, mais vient plutôt de la difficulté croissante qu'éprouvent les jeunes. La situation qui prévaut est en effet un renversement du paradigme traditionnel en Amérique du Nord selon lequel chaque génération s'attendait à obtenir des revenus supérieurs à ceux de ses prédécesseurs, et que ces revenus devaient s'accompagner d'une amélioration globale du mieux-être dans la société.

Que cette situation soit permanente ou simplement transitoire est une question qui suscite bien des discussions. Il ne manque pas d'économistes pour affirmer que tout rentrera dans l'ordre tôt ou tard. Le fait que certains affirment cela depuis nombre d'années ne signifie pas que le temps ne finira pas par leur donner raison. Mais, dans l'interval, les gouvernements doivent affronter de très sérieuses difficultés.

Malheureusement, les responsables de l'élaboration des politiques sont en panne d'idées. Ils sont aussi à court d'argent. Ils doivent en outre subir bien des formes d'intervention qui découlent des accords commerciaux internationaux et de la mobilité très élevée des capitaux. Des mesures radicales visant à redresser les inégalités croissantes dans les revenus, par exemple, pourraient entraîner un exode des investissements.

À l'origine de tout ceci se trouve le problème que l'on ne dispose à l'heure actuelle d'aucun diagnostic expliquant les diverses tendances défavorables qui frappent la population active. Plusieurs théories s'affrontent, concernant le chômage, la polarisation et le ralentissement de la croissance économique, mais il n'existe aucune analyse recueillant l'assement général qui pourrait offrir aux gouvernements une base minimum de confiance. Les deux dernières décennies ont été plus que concluentes en ce qui a trait aux preuves que les déficits budgétaires ne constituent pas la solution au chômage. De même, les limites de mesures telles que les subventions au développement industriel et au développement régional sont devenues bien connues, et les programmes de création d'emplois à grands renforts de milliards sont tout simplement hors de portée. Tous ces éléments placent les gouvernements dans un dilemme. Ceux-ci doivent en effet subir la pression de

dans le système d'enseignement postsecondaire est de bon augure pour qu'une des inéquités qui a la vie la plus dure, c'est-à-dire la condition des femmes sur le plan historique, soit en bonne voie de prendre fin.

Dans l'ensemble, toutefois, le tableau des tendances contemporaines est loin d'être rassurant. La solution de certains des problèmes sociaux dont il est question dans les présentes chapitres pourrait être financière. Des exemples de ces solutions pourraient être des programmes de transferts qui profitent aux familles à faible revenu et un soutien suffisant au système d'éducation pour garantir l'accessibilité aux étudiants ayant des moyens financiers limités. Alors que les gouvernements réussissent graduellement à équilibrer leurs systèmes financiers, des domaines comme ceux susmentionnés constitueront de sérieux candidats aux ressources additionnelles qui deviendront disponibles grâce à la croissance économique future. Il reste que certains problèmes très importants ne peuvent être résolus simplement par l'injection d'argent. À cet égard, citons l'utilisation inappropriée des mesures préventives dans le domaine de la santé par les groupes à faible revenu, l'incidence de l'éclatement de la famille sur les enfants et le nombre croissant de familles monoparentales.

De tous les problèmes que doivent affronter aujourd'hui les responsables de l'élaboration des politiques, aucun n'a plus opiniâtement résisté que celui du chômage et de la polarisation des revenus au sein de la population active. Traditionnellement, l'approche des gouvernements à l'égard de l'emploi a consisté à traiter ce dernier comme un sous-produit d'une gestion économique éclairée, et à appliquer par la suite des mesures supplémentaires diverses afin d'encourager la création directe d'emplois. Aujourd'hui, il est plus qu'évident que ces mesures ne donnent pas les résultats escomptés.

Parmi les phénomènes les plus largement répandus, on note un chômage élevé persistant, une stagnation des revenus réels depuis les années 1970, un recul marqué dans les revenus des jeunes et une dépendance croissante à l'égard des programmes de transfert de la part des titulaires d'emplois non spécialisés et moins bien rémunérés. Le nombre croissant de familles où les deux conjoints travaillent et une augmentation générale du niveau de scolarité ont contribué à compenser le mouvement mais ont été impuissants à annuler complètement les tendances de cet ordre.

maintenant nous n'avons pas vraiment assisté à une tempête de protestations.

Dans l'évaluation de l'équité entre les géné-

rations, il importe de tenir compte des transferts privés tout autant que de ceux du gouvernement. Il est fondamental dans nos sociétés que les parents viennent en aide à leurs enfants, et il y en a beaucoup au Canada qui continuent à le faire jusqu'à un âge très avancé. Élever une famille n'est pas un jeu à somme nulle, au cours duquel les enfants une fois qu'ils ont atteint la maturité dépendent pour leurs parents des sommes égales à celles qu'on étè dépensées pour leurs privés que les parents au profit de leurs enfants durant toute leur vie excède ce qu'ils reçoivent en retour. De plus, ces transferts ne dépassent pas, dans bien des cas, la somme des transferts que les personnes âgées reçoivent des gouvernements durant leur existence.

L'élimination virtuelle de l'extrême pauvreté chez les personnes âgées par l'entremise des transferts gouvernementaux devrait être considérée comme une réussite d'envergure de la politique sociale canadienne et non comme un problème contemporain. Cela ne signifie pas que certains ajustements aux programmes actuels comme ceux auxquels nous avons fait référence plus tôt n'ont pas été demandés. Toutefois, les difficultés que doit actuellement affronter la cohorte des préretraités ne sont pas principalement dues aux avantages qui sont offerts aux personnes âgées, et ces difficultés ne seraient que partiellement allégées même si ces avantages étaient, disons, réduits jusqu'au niveau de 1950. Les tendances sociales défavorables que nous vivons aujourd'hui doivent être envisagées de leur plein droit, dans la mesure où les gouvernements peuvent trouver des moyens de les juguler.

Les principales contraintes que doivent affronter la plupart des gouvernements aujourd'hui sont d'ordre financier et elles sont particulièrement difficiles en raison des efforts consentis à l'échelle du pays pour équilibrer les dépenses avec les revenus. Dans la plupart des territoires de compétence, on semble voir la lumière au bout du tunnel, mais à court terme, les gouvernements ne disposeront que de ressources limitées. Les opinions sont partagées en ce qui concerne les programmes de réduction du déficit, et elles continueront de l'être. Cependant, l'une des raisons les plus pressantes de réduire les emprunts du gouvernement est de mettre un terme à la croissance des intérêts sur la dette par rapport aux recettes des gouvernements, et ainsi de mettre

plus de ressources à la disposition des programmes à moyen terme.

Lorsque j'étais au Conseil du Trésor, vers le milieu des années 1970, les paiements pour le service de la dette représentaient environ 12 % des recettes. Si les gouvernements fédéraux réussissaient à maintenir ce ratio constant, c'est-à-dire s'ils n'avaient pas laissé leurs emprunts croître plus rapidement que leurs recettes au cours des décennies suivantes, les intérêts sur la dette publique seraient de 30 milliards de dollars moins élevés qu'ils ne le sont aujourd'hui. Voilà qui laisse beaucoup de place à la spéculation sur ce que le gouvernement pourrait accomplir avec 30 milliards de dollars additionnels chaque année, soit réduire les taxes, soit répondre aux besoins de programmes ou obtenir un effet d'une certaine combinaison des deux. Toutefois, il est au moins réconfortant de penser qu'il est peu probable que ce chiffre gonfle jusqu'à 40, 50 ou 60 milliards de dollars dans les années qui viennent.

Les chapitres du présent volume font état d'un certain nombre de tendances importantes. Ainsi, les revenus semblent de plus en plus polarisés, un sentiment d'insécurité persistant s'installe dans la population active, la mobilité sociale est toujours très éloignée de ce qu'elle devrait l'être, et une sous-classe de plus en plus nombreuse se repose sans cesse d'avantage sur les programmes gouvernementaux. Des questions cruciales se posent à nous concernant les possibilités d'avenir des millions de personnes de notre population qui ne sont pas suffisamment instruites et dont les compétences laissent à désirer. C'est précisément ce groupe qui a été le plus durement touché par les forces telles que le changement technologique rapide et la reorganisation en profondeur de l'industrie. En outre, le public s'inquiète de plus en plus de l'inégalité croissante, c'est-à-dire que les revenus d'un petit groupe au sommet de l'échelle augmentent rapidement tandis que la situation du gros de la population demeure inchangée.

On apprend aussi quelques bonnes nouvelles dans les chapitres qui suivent. L'alphabetisation connaît des progrès marqués et une proportion beaucoup plus importante des jeunes sont aux études à plein temps qu'il y a 15 ou 20 ans. Environ 61 % des jeunes hommes font des études plus poussées que leur père, et dans le cas des jeunes femmes, le chiffre atteint 65 %. Ce dernier chiffre est une nouvelle particulièrement réjouissante. Le fait que les femmes représentent désormais une majorité importante



autorisé l'existence de passifs non capitalisés importants dans divers programmes, comme l'Ontario Workers' Compensation, et la menace que représente le financement du régime de pensions du Canada et du régime de rentes du Québec au cours du prochain siècle. Tous ces facteurs représentent un fardeau important que les générations futures devront absorber d'une manière ou d'une autre.

Les problèmes intergénérationnels actuels comportent toutefois plusieurs caractéristiques rassurantes. Premièrement, ces problèmes ne sont pas de par leur nature particulièrement complexes. En présence d'une volonté politique suffisante, les solutions à ces problèmes sont relativement faciles à discerner. Il en va toutefois autrement de certains autres problèmes contemporains comme le chômage.

Deuxièmement, il a été démontré récemment que les répercussions sur le plan politique des problèmes intergénérationnels ne sont pas si sérieuses que personne ne veuille s'en occuper. Par exemple, il suffit de considérer le fait que sept provinces ont réussi à équilibrer leur budget ces dernières années et que certaines ont même commencé à rembourser leur dette accumulée. Elles ont en cela été rejointes par le gouvernement fédéral. De plus, le budget fédéral de 1996 a dévoilé un train de mesures destinées à réorganiser le programme de la sécurité de la vieillesse et à cibler les ressources pour qu'elles profitent aux personnes âgées qui en ont le plus besoin. Plus récemment, nous avons assisté à la signature d'une entente entre Ottawa et huit provinces visant à raccourcir le calendrier d'augmentation des cotisations au régime de pensions du Canada, de sorte que ceux qui sont dans la quarantaine et dans la cinquantaine devront cotiser davantage par rapport au coût des pensions de retraite qu'ils retireront vers soixante-dix ans. Chacune de ces mesures a suscité une certaine controverse, mais jusqu'à

Ce qui frappe surtout, à la lecture des chapitres du présent livre et du volume qui l'accompagne, c'est l'ampleur des changements qui sont survenus au Canada ces dernières décennies et qui se poursuivent toujours. Certains de ces changements sont les bienvenus, mais il en est beaucoup qui ne le sont pas. Près de trente ans après que le gouvernement de M. Pearson a fini de mettre en place les principaux éléments de nos programmes sociaux, bien des problèmes sociaux existent toujours, et cela fait particulièrement réfléchir. Les énormes dépenses consenties par les gouvernements ont eu des résultats mitigés et, dans certains secteurs, nous perdons du terrain plutôt que de progresser.

Il ressort clairement qu'au cours de la dernière décennie ou à peu près, la cohorte de ceux qui se préparent à la retraite a subi un certain nombre de réductions dans les transferts qui lui sont destinés comme l'assurance-chômage, et qu'en plus les gouvernements lui ont imposé une série d'augmentations de taxes. La cohorte des retraités, quant à elle, a été jusqu'à maintenant relativement épargnée, et une partie des avantages qui lui sont destinés ont augmenté grâce à l'indexation. Toutefois, la principale cause du déséquilibre entre les deux groupes ne découle pas d'un traitement excessivement généreux accordé aux personnes âgées ou de toute autre action de la part des gouvernements. Ce déséquilibre s'explique plutôt par un certain nombre de tendances qui ont vu le jour dans le marché du travail et l'économie mondiale et qui ont joué au détriment de la cohorte des futurs retraités.

Cela ne signifie pas que les actions, et dans certains cas les omissions, des gouvernements n'ont pas eu d'incidence. Nous sommes tous au courant des énormes dettes publiques qui se sont accumulées durant environ deux décennies de financement déficitaire. D'autres facteurs sont aussi bien connus, notamment le fait que l'on ait

Alice Nakamura, Lars Osberg, James Pesando, Suzanne Peters, Robin Rowley, William Scarth, Andrew Sharpe, Jean-Pierre Voyer, Ted Wannell, Brian Ward, Ging Wong, Allen Zeesman et David Zimmerman. J'aimerais aussi adresser des remerciements à Charles Beach, John Helliwell et Shelley Phipps pour leur participation à une séance de l'assemblée de 1998 de l'Association canadienne d'économique, dans le cadre de laquelle certains des chapitres du présent ouvrage ont été présentés et examinés, et j'aimerais souligner en outre les observations et les suggestions faites par Philip Cross, Susan McDaniel et John Myles, relativement à la première ébauche du chapitre 1. Parallèlement, il convient de noter que les vues exprimées dans le présent ouvrage sont celles des auteurs, et ne doivent pas être interprétées comme correspondant à la position officielle de Statistique Canada ou de Développement des ressources humaines Canada.

Miles Corak  
Statistique Canada

L'organisation de la conférence et la publication du présent ouvrage ont été rendues possible, pour une large part, grâce à la contribution de Valerie Thibault. J'aimerais la remercier, ainsi que Francine Simoneau, pour avoir assuré la présentation et la conception de la publication. Des remerciements vont aussi à Suzanne David, qui a effectué la révision du texte français avec beaucoup d'efficacité. Parmi les autres membres de l'équipe qui ont collaboré à la présente publication figure le personnel de la Division de la diffusion, ainsi qu'Agnes Thompson, de la Division des communications, qui a participé à l'organisation de la conférence.

Les personnes qui ont contribué à la rédaction du présent ouvrage examinent deux grands thèmes liés au bien-être des jeunes Canadiens. Tout d'abord, elles décrivent la nature du marché du travail dans lequel se retrouvent les jeunes adultes, ainsi que l'évolution de celui-ci depuis le début des années 70. En deuxième lieu, les auteurs étudient comment les familles, les collectivités et le secteur public influencent le cheminement des enfants vers une vie adulte réussie et autonome. La mise en commun de ces thèmes vient de l'importance accrue qui est accordée au bien-être des enfants à l'intérieur du discours politique et dans le cadre de l'élaboration des politiques gouvernementales.

Il va sans dire qu'une bonne analyse nécessite des données précises, et il ne fait aucun doute que le rôle de Statistique Canada consiste à offrir des données de grande qualité à l'appui des analyses qui sont effectuées et des décisions qui sont prises. Le contraire est également vrai, même si cela n'est pas aussi évident : des données précises nécessitent une bonne analyse. C'est donc dire que les nouveaux progrès du point de vue de l'analyse font souvent ressortir la nécessité d'organiser les données existantes de diverses façons, ainsi que d'élaborer de nouvelles données. Cela fait certainement partie des multiples raisons qui ont motivé Statistique Canada à mettre en place des capacités d'analyse de premier plan, ainsi qu'à maintenir des liens étroits avec les chercheurs.

Le présent ouvrage contribue à ce processus de nombreuses façons. Les approches en ce qui a trait à l'analyse varient considérablement, certains chapitres prenant la forme d'énoncés strictement descriptifs et d'autres reposant sur une gamme variée de méthodes et de perspectives d'analyse, y compris l'économie, la sociologie et la psychologie comportementale. Dans tous les cas, les auteurs tirent parti au maximum des données disponibles et organisent

les données existantes de façon innovatrice, en plus de créer et d'utiliser des sources de données entièrement nouvelles. L'ouvrage a en outre pour objectif de contribuer au processus entourant les politiques gouvernementales, dans un domaine qui prend de plus en plus d'importance. Le but visé est de donner accès aux décideurs, ainsi qu'aux Canadiens en général, à certaines des conclusions les plus récentes quant aux déterminants à long terme du bien-être des enfants, tout en soulignant le rôle de la famille, de la collectivité et de l'État à cet égard.

Un ouvrage connexe, publié en 1998 par Statistique Canada et intitulé *Les finances publiques et l'équité intergénérationnelle*, aborde la question des impôts et des transferts gouvernementaux dans la perspective des générations, et met l'accent sur l'application des politiques fiscales ainsi que sur la situation relative de personnes appartenant à des générations successives. Les deux ouvrages sont fondés sur des documents présentés dans le cadre d'une conférence qui s'est tenue à Statistique Canada, en février 1997. Le financement de la conférence a été assuré par la Direction des études analytiques de Statistique Canada, ainsi que par la Direction de la recherche appliquée de Développement des ressources humaines Canada. J'aimerais en outre remercier Stewart Wells, de Statistique Canada, et Allen Zeesman, de Développement des ressources humaines Canada, qui ont parrainé le projet. La conférence correspondait à une première étape importante du processus d'examen et de révision de documents destinés à la publication, et j'aimerais aussi remercier les personnes qui ont pris en charge les rôles de présidents, de commentateurs ou de rapporteurs : Bob Baldwin, Roderic Beaujot, Geoff Dougherty, Chris Ferrall, Jane Gentleman, David Gray, Ronald Hirschhorn, Guy Lacroix, Jim Lahey, Paul Lanoie, Dean Lillard, Huw Lloyd-Ellis, Mike McCracken, Susan McDaniel,



Chapitre 9	Incidence de l'héritage économique et social sur l'utilisation des soins de santé durant la première année de vie .....	155
	TAMARA KNIGHTON, CHRISTIAN HOULE, JEAN-MARIE BERTHELOT ET CAM MUSTARD	
Chapitre 10	La jeunesse éternelle? Des changements dans les modes de vie des jeunes .....	167
	DOMINIQUE MEUNER, PAUL BERNARD ET JOHANNE BOISJOLY	
Chapitre 11	Perspectives concernant les politiques ..... et des données »	183
	SUSAN A. MCDANIEL, « Équité intergénérationnelle : les répercussions des politiques et des données »	
	BOB BALDWIN, « Équité intergénérationnelle : les objectifs de la politique »	

Table des matières

V	Préface et remerciements
vii	Avant-propos
x	Collaborateurs
1	Chapitre 1 Introduction
13	Chapitre 2 Marchés, familles et transferts sociaux : tendances du faible revenu chez les jeunes et les personnes âgées, 1973-1995
35	Chapitre 3 Dégradation de la situation des jeunes hommes par rapport au marché du travail
57	Chapitre 4 Mobilité intergénérationnelle du revenu au Canada
71	Chapitre 5 Comment faire son chemin dans la vie : Quelques corrélats de la mobilité intergénérationnelle du revenu au Canada
99	Chapitre 6 Incidence de la rupture d'union des parents durant l'enfance sur le comportement démographique des jeunes adultes
115	Chapitre 7 Troubles psychiatriques, piètre réussite scolaire et problèmes sociaux chez l'enfant : rôles de la structure familiale et de la faiblesse du revenu
139	Chapitre 8 Aspects intergénérationnels de l'acquisition des capacités de lecture et de la scolarité
	PATRICE DE BROUCKER ET LVAL LAVALLÉE

**Données de catalogage avant publication (Canada)**

Vedette principale au titre:

Les marchés du travail, les institutions sociales et l'avenir des enfants au Canada

Texte en français et en anglais disposé tête-bêche.

ISBN 0-660-59384-X

CS89-553-XPB

1. Jeunesse – Canada – Conditions sociales.

2. Jeunesse – Canada – Conditions économiques.

3. Jeunesse – Travail – Canada.

4. Travail, marché du – Canada.

5. Revenu – Répartition – Canada.

6. Canada – Sociales conditions – 1991-.

I. Corak, Miles R. (Miles Raymond), 1958-.

II. Statistique Canada.

III. Titre.

IV. Titre: Labour Markets, Social Institutions, and the Future of Canada's Children.

HQ799.C3 L32 1998 305.23'0971 C98-988017-6F

Le papier utilisé dans la présente publication répond aux exigences minimales de l'American National Standard for Information Sciences" – "Permanence of Paper for Printed Library Materials", ANSI Z39.48 1984.







Statistique Canada

# Les marchés du travail, les institutions sociales et l'avenir des enfants au Canada

sous la direction de  
Miles Corak

Publication autorisée par le ministre  
responsable de Statistique Canada  
© Ministre de l'Industrie, 1998

Tous droits réservés. Il est interdit de reproduire ou de transmettre le contenu de la présente publication, sous quelque forme ou par quelque moyen que ce soit, enregistré ou non, sur support magnétique, reproduction électronique, mécanique, photographique, ou autre, ou de l'emmagasiner dans un système de recouvrement, sans l'autorisation écrite préalable des Services de concession des droits de licence, Division du marketing, Statistique Canada, Ottawa, Ontario, Canada, K1A 0T6.

Novembre 1998

N° 89-553-XPB au catalogue  
Périodicité : hors-série

ISBN 0-660-59384-X  
Ottawa

## Note de reconnaissance

Le succès du système statistique du Canada repose sur un partenariat bien établi entre Statistique Canada et la population, les entreprises, les administrations canadiennes et les autres organismes. Sans cette collaboration et cette bonne volonté, il serait impossible de produire des statistiques précises et actuelles.

Des données sous plusieurs formes

Statistique Canada diffuse les données sous formes diverses. Outre les publications, des totalisations habituelles et spéciales sont offertes. Les données sont disponibles sur Internet, disque compact, disquette, imprimé d'ordinateur, microfiche et microfilm, et bande magnétique. Des cartes et d'autres documents de référence géographiques sont disponibles pour certaines sortes de données. L'accès direct à des données agrégées est possible par le truchement de CANSIM, la base de données ordinaire et le système d'extraction de Statistique Canada.

Comment obtenir d'autres renseignements

Toute demande de renseignements au sujet de la présente publication ou au sujet de statistiques ou de services connexes doit être adressée à : Direction des études analytiques, Statistique Canada, Ottawa, Ontario, K1A 0T6 (téléphone : (613) 951-9047, fax : (613) 951-5403, e-mail : [coramill@statcan.ca](mailto:coramill@statcan.ca)) ou à l'un des centres de consultation régionaux de Statistique Canada :

Halifax	(902) 426-5331	Regina	(306) 780-5405
Montréal	(514) 283-5725	Edmonton	(403) 495-3027
Ottawa	(613) 951-8116	Calgary	(403) 292-6717
Toronto	(416) 973-6586	Vancouver	(604) 666-3691
Winnipeg	(204) 983-4020		

Vous pouvez également visiter notre site sur le Web : <http://www.statcan.ca>

Un service d'appel interurbain sans frais est offert à tous les utilisateurs qui habitent à l'extérieur des zones de communication locale des centres de consultation régionaux.

Service national de renseignements  
Service national d'appareils de télécommunications  
pour les mainteneurs  
Numéro pour commander seulement (Canada et États-Unis)  
1 800 363-7629  
1 800 267-6677

Renseignements sur les commandes et les abonnements

Les prix n'incluent pas la taxe de vente  
Le produit n° 89-553-XPB au catalogue est publié sur version papier au coût de 35 \$ au Canada. À l'extérieur du Canada, le coût est de 35 \$ US.

Veuillez commander par la poste, en écrivant à Statistique Canada, Division de la diffusion, Gestion de la circulation, 120, avenue Parkdale, Ottawa (Ontario) K1A 0T6; par téléphone, en composant le (613) 951-7277 ou le 1 800 770-1033; par télécopieur, en composant le (613) 951-1584 ou le 1 800 889-9734; ou par Internet : [order@statcan.ca](mailto:order@statcan.ca). Lorsque vous signalez un changement d'adresse, veuillez nous fournir l'ancienne et la nouvelle adresses. On peut aussi se procurer les produits de Statistique Canada auprès des agents autorisés, dans les librairies et dans les bureaux régionaux de Statistique Canada.

Normes de service à la clientèle

Statistique Canada s'engage à fournir à ses clients des services rapides, fiables et courtois et dans la langue officielle de leur choix. À cet égard, notre organisme s'est doté de normes de service à la clientèle qui doivent être observées par les employés lorsqu'ils offrent des services à la clientèle. Pour obtenir une copie de ces normes de service, veuillez communiquer avec le centre de consultation régional de Statistique Canada le plus près de chez vous.

N° 89-553-XPB au catalogue

# Les marchés du travail, les institutions sociales et l'avenir des enfants au Canada

sous la direction de  
Miles Corak













